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A FIRST COURSE IN PHILOSOPHY

BY

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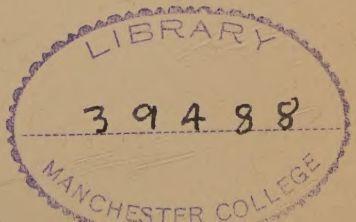
TO ALL MY STUDENTS IN PHILOSOPHY WHO, IN SUCCESSIVE CLASSES FOR NEARLY A QUARTER OF A CENTURY, HAVE BEEN AN UNFAILING SPRING OF PLEASURE AND INSPIRATION, THIS BOOK IS INSCRIBED IN AFFECTIONATE REMEMBRANCE



PREFACE

This book, the outgrowth of more than twenty years of teaching, aims especially to meet the wants of students who are young in the study of philosophy. It is my hope also, that this book will be of service to other students who, working in other fields, desire to know something of those problems of the world and our human life with which philosophers are occupied.

I have endeavored to set forth the main doctrine of philosophy in terms sufficiently simple, and in an exposition sufficiently ample to enable the student to comprehend the meaning of these doctrines and to appreciate their significance.

I have aimed to encourage the student to philosophize for himself, rather than merely to appropriate the product of other men's thinking. With this purpose in view, I have let the representatives of various philosophical theories advocate and defend their respective doctrines; and for the most part, have refrained from closing the debate.

My acquaintance with philosophy has taught me that its questions are still open, and that it is the mark of the truly philosophic mind to hold whatever convictions to which it has attained, as tentative and liable to revision in the light of fuller evidence.

J. E. R.

WILLIAMS COLLEGE,
February 4, 1913.

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A FIRST COURSE IN PHILOSOPHY

CHAPTER I

INTRODUCTION

I. THE MEANING OF PHILOSOPHY

The following may serve as definitions of philosophy:

1. Any systematic and persistent thinking upon the nature and meaning of the real world and our existence.

2. An attempt to reach ultimate explanation of experience.

3. An attempt to solve certain problems which the universe about us and our human life force upon our minds.

II. PHILOSOPHY AND SCIENCE

Respecting the relation of philosophy to science, two views are held. One view is that they are fundamentally identical. Their subject is the same, their ultimate aim is the same; the difference between them is, that science exists only in the form of special sciences, each of which having a field within which its investigations are confined and within which its principles and explanations are valid, while the field of philosophy itself is coextensive with all the fields of the special sciences, philosophy being the ideal consummation of each special science, a final synthesis of them all. Make each science complete, unite the special knowledge so obtained, and the result would be philosophic knowledge.

The aim of philosophy would be realized in the realization of the aims of each of the special sciences.

The other view is that philosophy is essentially different from science, that it has a field of its own, problems peculiar to itself, and which do not lie in the field of the special sciences.

Were each science to attain ideal completion, the task of philosophy would still remain, its problems would still await solution. Did we now possess complete science the questions which philosophy attempts to answer would still be open. Philosophy has a field of its own which can be delimited.

In one aspect this field includes and seems to be only coextensive with the special fields of science. The reason for this close relation is the fact, that philosophy presupposes and appropriates the knowledge and the conceptions which each science supplies, and by means of these philosophy seeks to frame a conception of the whole of reality which will find a place for the partial truths and conceptions of science and to unite them in a total view and final synthesis.

But, obviously, that which seeks the synthesis of the sciences must itself be distinct from each of them, and from science as science. The problem and aim of philosophy therefore clearly demarcates its field from the field of the special sciences.

To be specific, there are two sorts of matters which do not lie within the province of the special sciences, and which do lie within the field of philosophy: 1. matters which each science must presuppose and make its working assumptions or postulates; 2. matters which lie beyond

the bounds which science sets for its peculiar task, residual problems which transcend the boundary lines within which scientific explanation moves.

The first class of matters which lie outside the field of science contain such conceptions as the following: Space, Time, Matter, Causation, Force, Life, Mind, etc. The exact meaning of these conceptions lies outside of the field of science. It is the function of science to describe in the simplest and fewest possible terms the motions of that which we call matter; but science does not undertake to say what matter is. Science explains the phenomena of life, the evolution of living beings, it describes their various behaviors, but it does not tell us what life is, whence it came or whither it goes. Science describes the various functions of mind, it formulates the laws of their occurrence, it investigates the connection between these phenomena and phenomena of the physical order; but science leaves unanswered the question, What is mind?

The second species of matters which lie beyond the boundaries of science are the problems of meaning, of value, of purpose. These questions have their source in our human experiences, in our rational, our feeling, our active nature; these questions of whence, whither, why, and what for, are the most significant and the most urgent ones which the world and life put to us; but to them science has no answer. Her function is exhausted when she has answered the question of how. The function of science is description; so far as the world is describable, it belongs to science. But the world of description is not all of the world. There is a world of purposes; there are meanings and values, and of these science takes no account.

One of the most important achievements of modern science is the sharply defined and narrowly drawn limits to scientific explanation. It is to this clearer understanding of its own task and its limits that science is in no small degree indebted for her most important and brilliant achievements.

The emancipation of modern science from metaphysics coincides with the rapid progress, the surprising developments of science within a comparatively recent period; but this more distinct and narrower boundary of science is at the same time a clearer determination of the field of philosophy and it is more possible than it has been at any time before, to render to science the things that belong to science, and to philosophy the things that belong to philosophy. This second view of the relation between philosophy and science is the one we must adopt; they are clearly different in their subject matters and in their aims.

But while they are different, they are intimately related, and, on the side of philosophy, the relation is one of dependence. Philosophy presupposes the results attained by the special sciences; it can frame its world view only by uniting in that view the conceptions which the several sciences have elaborated. Nothing can be true in philosophy which is false in science; and philosophy can ignore no fact which science has established. But, on the other hand, science must confess by the very limitations she has imposed upon her work, that she stops short of that final explanation, that ultimate solution of the world problem which it is the very essence of our rational nature to seek after. Philosophy is the necessary complement of science.

III. PHILOSOPHY AND RELIGION

They differ in aim and motive. The aim of philosophy is theoretic. It is comprehensive knowledge, completeness of intellectual view. The aim of religion is practical; it is the satisfaction of life. What it seeks to know it seeks as a means to this end. Philosophy grows out of the rational demand for truth. Religion springs from the needs of the heart and the will. In religion, man seeks a reality to which he can entrust his life and all that is dear to him, a reality which will conserve his supreme values, prosper his aims, fulfill his wishes, aspirations and hopes. What man desires to know in religion, and *all* that he religiously desires, is, that his World or some Being of his World is friendly to him and is able to maintain his life against whatever is destructive or harmful.

This endeavor of man to relate himself in a practical way to a power not himself, but which is for him and works for his good, is the substance underlying every manifestation of religion, from that of primitive men to the religion of the most civilized men of to-day.

Both philosophy and religion have to do with objective and ultimate reality, with that which has supreme significance and value. Both seek the solution of the problem of the world, or rather of our existence, our place in this world. It is no less vital to religion to have assurance that the object of its trust and worship really exists, than is the objective reality to the philosopher who seeks to comprehend it. There is a further difference which should not be overlooked; it is that philosophy is more comprehensive than religion; it includes religion as one of its problems. Philosophy discharges the same function in respect to our

religious experience that it exercises in relation to science, or to man's life in all its aspects; that function is to gain a comprehensive world view, in which the beliefs and ideals of religion shall have their place determined, their value for life rightly appraised, their claim to validity or truth passed upon by that highest tribunal, the reflecting and valuing self conscious spirit of man. For instance, religion and science are said to be in conflict, and the problem of a reconciliation between them is of pressing importance. Religion and morality have, it is claimed, changed their attitude to each other. In the past their relation has been one of mutual dependence and reciprocal influence. The time has now come when morality should quite dispense with religion; a religious belief, so far from being important and serviceable to the moral life, is detrimental to the highest type of morality. Clearly it belongs to philosopy to determine, so far as any settlement of these matters can be made, what are the relations of religion and science on the one side and of religion and morality on the other.

IV. THE REASONS FOR PHILOSOPHY

Philosophy is an inevitable undertaking. When experience has ripened and reason is awakened and he has begun to eat of the tree of knowledge, man must philosophize. The option he has is to do so badly, or in some degree wisely and successfully.

It has often been an objection to philosophy, that it leads only to doubt, never to knowledge; it asks questions to which it can give no answer, it propounds riddles it cannot solve; it is a fruitless labor, a vain quest; the latest

philosophical thinker is no nearer the goal of his endeavor than the first who essayed the task. In their answers to the questions concerning the universe, the meaning and destiny of man's existence, the philosophers are no nearer an agreement than were those of the first generation. These conflicting solutions of philosophy should warn us from embarking upon an enterprise that has brought so little result; and admonish us against the unwisdom of concerning ourselves with matters which it would be wiser to conclude are beyond our human faculties.

Against objections of this sort, the justification of philosophy in the following: It is not the philosopher, but the universe and our human life that propound the riddles which so tempt and baffle at the same time our ventures of thought. Philosophy does not invent these problems; it is our best endeavor to *solve* in some manner the problems we cannot avoid if we think at all; if we are to live a rational life, and not be content with the life of the brute. But even if it were true that philosophy has hitherto been a fruitless quest for the Holy Grail, it is better for man, worthier of his nature to have gone on that quest than tamely to have remained at home, sunk in the dull life of the brain, or occupied only with the tasks he can easily and surely accomplish. To seek truth even if we fail to find it, is better than to decline the search either through fear of failure or indifference to the enterprise.

Furthermore, were it the case that this labor of philosophy has brought no success either to the generations before us or to our own age, it is by no means settled that those who are to come after us will not succeed where we have failed; the way is yet long and there is time yet for achieve-

ments in thought of which we can form but a faint conception.

Be that as it may, that which has called forth philosophy is man's rational life, and the philosophic endeavor has been prompted and sustained by a deep and hitherto ineradicable faith, that the world and our human existence have a meaning which we are destined in an increasing measure to understand. Man's constitutional faith is, that he will not be put to intellectual confusion in the end, that his craving for meaning and for good are yet to be satisfied. Man inevitably believes that if he orders his thoughts aright, and makes rational his actions, his world will eventually show itself to be intelligible, and his search for truth will not end in disappointment.

Now this deeply wrought faith man cannot rationally abandon until his best has been done, his last effort made. To become faithless and abandon the quest until it is certain that the world problem has no solution, until it is certain there is no Holy Grail, were to be unfaithful to man's own higher nature; it were to decline in the scale of being; to become something less than man. But is the case so bad with our human philosophizing endeavors? Surely something has been gained by this labor of so many generations of great thinkers; I for one, think the problems of philosophy, the limits within which our thinking can hope for success, are better understood, more clearly defined, than they were in the minds of the earlier philosophical thinkers. Now it is no slight gain to have brought the world-problem, and the problem of our existence into clearer more definite formulation, and to have discovered within what limits any solution of these great problems is possible, to have

eliminated some solutions, and to have determined those within which our final choice must fall.

The demarcation of the special sciences, the elimination from their fields of matters which are irrelevant to science; in short, the establishment of the sciences, is itself a philosophic achievement. For the conception of science, the determination of its function, its limit, is possible only if some point of view is taken which lies outside of the fields of science, from which it is possible to comprehend and pass judgment upon science itself; this knowing of science is itself a philosophical function.

But, apart from the consideration of progress in philosophy and approximation to its final aim, philosophy is justified for another reason—it fosters the discipline of the mind, it imparts the willingness to see all, to prove all things, to suspend judgment until the evidence is all in; to exercise a rational restraint upon passional motives. This is both requisite to true philosophizing and the natural fruit of its exercise. The philosopher as such is not a believer, he is rather a critical observer and judge of our various human beliefs, or better, he is one who is seeking by this thoughtful survey and critical judgment to determine the relative truth-values of these often warring beliefs. Philosophy may be defined as man's endeavor to make rational, coherent, and satisfying his inevitable beliefs. Philosophy does not create beliefs, its function is to rationalize them. To the philosopher, it is not so important *that* we believe, as are our reasons for believing and the coherence of a given belief with all our other beliefs and with the totality of our experience.

PART I

THE PROBLEM OF REALITY

CHAPTER II

THE MEANING OF BEING REAL

There are two questions which, though they are most intimately connected, it is nevertheless important to keep distinct. One question is, What should we mean by the predicate term, when we say a certain object is real? The other question is, What is the nature of the object we accept as real? Of course these two questions can be asked concerning the same object; one and the same object presents two aspects, is present to our minds in two ways. One of these aspects we signify by the term *that;* the other by the term *what;* using the corresponding abstract terms we speak now of the *thatness* of the object and again of the *whatness* of the object, or what means the same thing, we speak of the *realness* of the object, and of its nature as a real object. I may be in quite different states of mind in relation to the true character of a presented object. I may be absolutely certain that the object *exists;* but I may be altogether uncertain what is the ultimate nature of that same object. Of these two fundamental questions in philosophy, it is plainly the first with which we must make a beginning. And accordingly, our first special problem in philosophy is the meaning

of being real. When for instance, I say of a star, I seem to be perceiving, The star is real; while of the star in my dream, I afterwards say, It was an unreal star, what should I mean by the realness of the star of my waking perception, and by the unrealness of the star of my dream? The star of my dream has all the qualities which the star of my waking experience possesses; it is bright with the same luster, it shines in the same skies, it excites the same emotions; wherein then lies the difference which I mean to assert when I say of one of the stars, It is real, and of the other, It is unreal? In what consists this realness of the one and the unrealness of the other star? The specific problem is thus defined. We can best approach its solution if we first note some of the characteristics of those objects we regard as real.

1. Real objects are social objects. The real star is not my private object; it is shared by other minds. I can appeal to the perceptions of my human fellows. Indeed I must be able to do so if I am to justify my claim that my star is a real star. On the contrary, the star I seem to perceive in a hallucination I may be experiencing is a star which no other mind at the same time could perceive; this star is not a common object; my experience is an unsocial one.

2. The second characteristic of a real object is, it permits and demands from me a different behavior toward it from that which it is possible or proper for me to adopt toward an unreal object. I must take account of a real object in my thinking, in my purpose and in my actions. I must in some way reckon with it, and to some extent at least on its own terms. The real object thus coerces my behavior, imposes a condition upon my thinking, if that thinking is

to attain its end. The real object in one aspect of it is an obstacle to my thinking, my willing and to my action in certain directions; it compels a choice of other directions if I am to go on at all, and it may not permit me to remain where I am.

3. But on the other hand, the real object is also responsive to my mind, it is fulfilling in relation to some intention or purpose or want of mine: it answers my questions, it completes what would otherwise remain partial, fragmentary, and unsatisfying. This third characteristic can no more be denied of the real object than can the other two.

But after all, does this statement of the characteristics of the objects we call real, answer our question about the meaning of being real? Would any enumeration, however complete, of the marks which enable us to tell what objects *are* real, be a definition of what we mean by calling an object real?

We may admit that a real object *does* possess these qualities, *does* function in this manner in relation to our experience, but does all this really answer the question we are trying to answer, namely, wherein lies the realness of this object?

Take the characteristics we call its social significance. Let it be true that no object is real which all minds could not recognize, do we mean that it is just this fact that all these minds *can* have this same object present to them, which constitutes the realness of the object? Is it the common experience which makes the object a real one, or does the common experience or possibility of it afford the proof that the object *is* real? In which case the realness of the object is something distinct from the common experi-

ence. It is the *ground* or *reason* for that common experience. The realness of the object explains the common experience, which otherwise would be an unsolved problem but the mere fact that it is a social object does not constitute its realness.

The case is the same with the other two characteristics of real objects. What we should mean by their being real is distinct from certain relations they sustain to our minds, certain functions they discharge, or any significance or value which may attach to them as real; being real, these two things belong to them, but it is not these things we should mean by their being real. The meaning of what is to be real, it would seem, must be sought in some other characteristic of the object and in some other relation to our minds, and it is just in this mode of existence of the object, its relation to a thinking or affirming mind that this first problem in philosophy centers. And since every object (or object matter of our thought) whether real or unreal must exist in relation to some mind, a real object must be in some manner related to the mind. Our problem can be formulated in a narrower compass and in more exact terms, namely: How is the real object related to the idea which seeks to know that object? I am indebted to Professor Royce for this simple but exceedingly fruitful definition of the problem of real being.

Concerning real being two doctrines are held. One of these by an unfortunate terminology is called the realistic conception of being. This doctrine holds that to be real means to be independent of any perceiving or thinking consciousness. This does not mean that the object exists apart from all relations to our minds. An absolutely

unrelated object is a self contradictory conception. The object must sustain some relations to our minds in order to be judged as real or unreal.

The realist (for so we will call him) maintains that the realness of the object is its independence of any merely perceiving or asserting mind for its character as real. The object was real prior to this mind's acknowledgment of it, and it would remain real were this mind to vanish from the universe. The real object is one which can enter into the knowing relation and pass out of it without being affected thereby in *its character as real.* Merely thinking of or cognizing such an object does not in any wise affect the matter of its real existence.

The second of these doctrines, which we will call the idealistic conception of the real being, maintains that the real object cannot be independent of the idea which knows or seeks it. The real object, this doctrine asserts, would lose its realness altogether, did no mind perceive, think, or otherwise take notice of it. The realness of the object, no less than its qualities, belongs to the object only because the object is *not* independent of experience. It is worth while to discuss these two doctrines somewhat.

The realist in support of his view, appeals to the experience of being coerced in our perceptions, to our consciousness of obstacles, resistance to actions, to a persistent stubborness in the grain of experience, which we cannot change at will; his contention is that these facts compel the assumption of something which is independent of our experience itself; that in these experiences we have to do with a reality, the certain mark of which is independence of our minds.

To this the idealist replies, coerciveness, resistance to our active experiences, stubborness of experience are doubtless facts; they are situations which arise in the course of experience; but they do not for that reason point to something which is independent of experience as such; but rather to other facts, other features of experience which are incompatible with those parts or regions of experience in which this coercion, resistance, or persistence is felt. I am coerced in some particular experience, not because there is something which is independent of all experience, but because other parts of experience, other needs, other purposes call for a limitation or a rejection altogether of this particular activity or process of experience. I meet resistance to my efforts, not because there is something which is independent of all purposive activity, but because other interests and purposes call for a different kind or direction of activity. The stubborness in the grain of experience does not come from something which is outside and independent of experience itself, but from the structure and habits which experience has acquired, and in particular from the social character of our human experience.

This observation leads to the second fact to which the realist appears in support of his doctrine, that fact is, just this social significance of real objects. Real objects are the basis of common perception; they are the standard of agreeing judgments, they make possible social intercommunication and serve as the basis of common plans of action.

All this is possible, says the realist, only if there is something which is independent, both of every individual experience and of the common experience also. It is the

object's independence which makes it intelligible that there can be common perceptions, common plans of action, and cooperation in practical activities.

Now the idealist freely recognizes this independence of the merely individual or private mind in the case of our perceptions, assertions of fact and of our social communications and actions; but, he maintains, that independence of the individual's experience is not for that reason independence of *all* experience, of experience *ueberhaupt*. His contention is, that the character of independence in relation to the individual's mind has been created by the social medium in which particular objects have been constituted and defined. Real objects exist only in or for our social experience; when, therefore, the individual appeals from his private experience to the object as real as a standard of judgment, he is appealing to his social fellows' experience; for the real is what all the world experiences. Thus does the object reveal its realness, not by its *independence* of out perceptions, thoughts, and purposes; but by the fact that it sustains a relation of *dependence* upon *all* our minds. The object is real for the sole reason that it is an inseparable part of our mental lives; because it is the fulfiller of purposes, the satisfaction of wants the completer of fragmentary meanings; it is just these effective connections between the object and our minds, which the term *real* properly connotes.

Against the realist's position the idealist makes this further objection. Did the realness of objects consist in their independence, we could never know which of the multitudinous objects presented to us, *are* real, for, in order to determine that matter, it would be necessary to know whether the object which claims to be real; could validate

its claim by continuing to exist and to remain unaffected in the absence or withdrawal of all human perceptions or thinking; now, obviously such a test of real being is impossible, and consequently the realist's doctrine affords us no test or criterion for distinguishing between real and unreal objects.

The two opposed meanings of real-being which have been discussed will come into view again, since they underly the doctrine of the nature of the real, and also the doctrine of knowledge.

CHAPTER III

THE NATURE OF THE REAL

In this chapter we pass on to the second special problem for philosophical thinking. The nature of what is real or more accurately, the nature of ultimately real being.

I. DUALISM

The real beings in the world of our prephilosophical thinking appear to be of two readily distinguishable types, (1) material beings, and (2) minds. To one or the other of these categories we assign every object of experience.

The differences which in our experience seem to separate these two kinds of being are ultimate and irreducible. Accordingly, the philosophical doctrine which lies closest to empirical, common sense thinking of the plain man, is dualism.

The essence of this doctrine is, real beings for our human minds at least, are of two fundamentally different kinds, material beings and minds. Matter and mind are two terms under which our real world may be defined. Matter and mind designate, substance-beings, whose properties and modes of action are fundamentally unlike. Each of these kinds of being has a nature of its own, neither depending upon the other for its nature, or its power of action, or of being affected by action. It must be borne in mind that the Dualism here set forth is not absolute. The viewpoint is that of our human minds, not that of the Absolute Mind,

if there be such kind of Ideal Being. This dualistic relation obtains between beings which are admittedly finite, and it may be added, dependent beings. The dualist of this type may concede, that, as between the Absolute Being, the Original and All Conditioning Being, and the real beings which compose our world of experience, the relation is not of dualistic separation and independence; his proposition is that real beings as substances constitute our known world, and that these beings are of two types which are unlike in their essential attributes.

With this statement of the doctrine of dualism we will proceed to its proof. The issue between the dualist and his opponents turns on the nature of what are called external objects; the dualist holds that these objects are non-mental, and hence that the physical universe consists of non-mental beings and their actions. The rejecter of this view of the external world denies this.

The first difficulty which the dualist encounters are the so-called secondary qualities of material objects. He seems forced to admit that these qualities are subjective affections, not properties of non-mental things; colors, sounds, smells, etc., do not exist outside or independently of perceiving minds; they are mental states. In whatever way they may originate, their content or quale, is not any non-mental reality. Hence, some part of what the unphilosophical thinker takes as being non-mental turns out to be altogether mental in its very essence; their *esse* is their *percipi*, and if, as the dualist maintains, these qualities are objective in the sense at least that we are bound in some manner to refer them to objects, they tell us nothing respecting the nature of these objects, whether these objects are mind-like or

non-mental beings. But the dualist may fall back upon the primary qualities of Descartes and Locke—extension, form, solidity, and motion, and maintain with Locke, that it is the distinction of these qualities, that they do reveal to us material beings; these qualities being as Descartes held essential to the conception of matter itself; hence these qualities, to use Locke's words, "Are in things whether we perceive them or not." And since as Locke maintained, it is these qualities which we perceive, it follows that in perception we have disclosed to us the essential nature of non-mental beings.

But unfortunately, it is just this assumption of so-called primary or essential qualities that is challenged by the opponent of dualism; and this distinction between two sorts of qualities is a vulnerable point in the dualist's doctrine. For how can he show that the primary qualities—extension, solidity, motion, etc.—are in things any more than are the *secondary* qualities whose objective existence he has surrendered? Space, resistance, motion, etc., signify certain perceptions, certain forms and combinations of our sensationsl as truly as do color, sound, odor, etc. They do not revea- to us the existence of non-mental objects any more than do the so-called secondary qualities which the dualist has admitted carry no such relation of material reality.

Such appears to be the dilemma into which the dualist is brought by his attempt to maintain a distinction between the qualities of objects. The first step toward this fatal situa, tion is the admission that things are not as the plain man believes. They are not just what they seem to be; he is then forced to the admission that things are in *no* respect what they appear to be; and the inevitable question comes,

Do they appear at all or what reason is there for holding that these are non-mental things at all? It would seem that if the dualist accepts the doctrine which reduces some qualities of his non-mental beings to subjective states, he will be compelled to reduce all these qualities to the same terms; and when he has done so, the residuum of real being will be Locke's substance, which could only be defined as a something we know not what—substratum or support of—so-called qualities. Obviously such a conclusion is fatal to the dualist's doctrine.

But, after all, is the dualist forced into such a dilemma? Why need he take the first fatal step? Why need he go the one mile with his adversary, who will certainly compel him to go the twain? Why should he abandon the position of the plain man, the view of common sense; and not hold that colors, sounds, smells, etc., belong to things as truly as length, breadth, solidity, and motion; and that they reveal as truly the nature and mode of behavior of real beings as do the other qualities? Why should not the dualist maintain that sensations are not subjective states merely, but are cognitive acts, and hence objective in their necessary implication? Should he not maintain that in sensation we are cognitive of objective reality, and this is true in some degree of every sensation? May not the dualist hold that the plain man is not altogether in error in his conviction that it is the fragrance of the orange that he smells, its sweetness that he tastes, its special shade of yellow color that he sees? May not the dualist maintain that an objective existence of some sort at least is as indubitably presented in these sensations as it is in the space sensations or those of touch, resistance, or motion?

The positive proof of the dualistic theory is drawn from our cognitive experience, and is the following: Our immediate experience gives knowledge of something objective which provokes from us various reactions or responses, such as sense perceptions, affective states, emotional attitudes, and volitional actions. It is the clear testimony of consciousness that in these reactive states we are dealing with a trans-subjective reality of some sort. This experience datum is the starting-point of all further knowledge. By further experiences, under the lead, and by the aid of ideas (whose function it is to represent and variously unite experience), we gradually make out and define the nature, the mode of behavior, of objectively existing things. Now, our scientific knowledge is built up essentially in the same way as our prescientific knowledge; the main difference is, that in science, we employ more accurate and better regulated methods of observation; we test more carefully ideas by experience; we have invented instruments for finer, more extensive observation, and for more exact measurement. Above all, we have constructed those wonderful mental instruments, abstract, general ideas—ideal descriptions and formulas in which we can summarize and describe countless phenomena, and those which range over a boundless extent. Thanks to these instruments of observation and reasoning, science is able to penetrate far into the structure of the physical universe which environs us.

But this more extended view of science does not tend to obliterate the distinction between mind and matter. It does not tend to assimilate the one type of reality to the other. On the contrary, the non-mind-like character of physical reality is more strongly impressed upon the

imagination with every step in the progress of physical science.

We will leave it to the idealist to meet this argument, when we shall listen to his explanation of the world of scientific knowledge. In the meantime, the reasoning of the dualist encounters an objection of the following sort. Dualism makes the fact of knowledge a miracle, to say the least. It is certainly incomprehensible how a knowing relation can exist between two such disparate beings as his theory postulates. The expedients which the continuators of Descartes' theory were compelled to use in their efforts to get over the ugly broad ditch, when mind and body are conceived to be fundamentally different in their essential properties, are an instructive chapter in the history of human speculation.

The dualist must meet this objection with a direct challenge of its assumption, that only beings of like natures can act upon each other, or come into the cognitive relations, or exist in a unity of reciprocal influence. "What sort of beings," he will say, "can be related to each other, or in what way they are related, only experience can inform us; it is not a matter to be settled by *a priori* assertions of what is possible. Our human minds cannot determine how reality must be made, or what relations between real beings are possible antecedent to what experience reveals to us. Our experience does constrain us to recognize two sorts of beings, having fundamentally different attributes; and on the basis of the same experience we are constrained to assume that interaction or reciprocal dependency does obtain between mental and corporeal being. This influence cannot be rejected on the ground of its alleged incompre-

hensibility. Our experience clearly presents this relation of reciprocal influence between mind and body; things go on as if mental states determined the occurrence of body states, and, conversely, body states determine mental states; there is as much evidence from experience, that mind and body in some meaning of the term act upon each other, as there is that your physical bodies act upon each other. To object that causal connection cannot exist between the mental and the physical is not to the point, until it is made clear exactly what is to be meant by causal connection. If nothing more is to be meant than a relation of invariable succession, there is as much causal connection between mental states and body states as there is between physical states; if the con. ception of causality be that of some sort of dynamic connection, involving a passing influence, there is as good evidence that this sort of connection holds between the mind and body as there is that it obtains between two material bodies."

It is in this way that the dualist may be supposed to give his reasons for the faith that is in him, and defend his belief against objections. It is to be hoped that the student will take this presentation of the dualist's reasons as a suggestion to independent reasoning on his own part. Let him examine the dualist's doctrine and he may discover weaknesses in the reasons which support the dualistic theory; he may add confirmations of it by reasoning which has not been outlined. The student in philosophy does not need to go far ere he discovers that it is rash to conclude that the last word has already been spoken, either for or against any philosophical doctrine.

II. MATERIALISM

I will next turn to another solution of our problem of the nature by real being. This is the solution offered by the materialist. This doctrine may be best defined in the following statement: Fundamental or substance-being is material; all other forms of being have been derived from, and for their existence and their powers of action, are dependent upon material processes. It should be carefully noted that the materialist does not deny the existence of mind as mental processes nor their unlikeness to material processes. His doctrine is, that mind owes its existence to matter, and so depends upon material conditions, that if these conditions are removed or altered in a certain way, mind ceases to be, or is profoundly changed. The essential import of this doctrine is its reduction of the mental life to absolute dependency upon material processes. Matter is original and conditioning in its relation to mind.

So much for the statement of the doctrine. We proceed next to the proof of this doctrine. The theory in the first place recommends itself by its seeming clearness and simplicity, and especially by the apparent fact that its real being is actually present to us in our sense experience. Matter appears to be an unquestionable fact. Furthermore, material being seems to be so easily defined, its very nature lies open to view; we are so well acquainted with its properties; these are seemingly few, altogether conceivable, and the laws in accordance with which material being behaves are simple and admit of a clear and exact formulation.

A second proof is supposed to be afforded by physical science. If matter is taken to be the basal reality,

and all processes and phenomena are reduced in ultimate terms to material processes, it becomes possible to grasp in thought the unity, the uniformity and continuity which the world exhibits, when we thus penetrate beyond the ever-changing, disconnected, and endless variety of its surface aspects.

The third proof of this theory is based upon the peculiar relation which mental processes sustain to matter.

Within the field of our knowledge, mind nowhere appears save in connection with material processes; so far as we know it exists only in connection with a material organism —more specifically, a nervous system. Material processes, however, do exist apart from the mind. The inference to be drawn from this fact would seem to be, that matter is the original and conditioning reality, mind a dependency of matter; its existence is phenomenal.

Again, if we survey the history of mind, we shall see that matter is first in the order of genesis; the cosmos was old before the advent of mind; only when material organisms had reached a certain stage of development did mind appear; and its growth from its elementary form runs parallel with the evolution of the nervous system apart from which it never appears. Once more, The facts of pathology force upon us the same conviction of the dependent, the phenomenal being of mind. Injuries to the brain or diseases in this delicate organ are invariably followed by mental disorder and even by the destruction of intelligence.

The clear deduction from these facts, the materialist maintains, is, that mind exists as an accompaniment of material facts; its destiny is bound up with that of material organisms—it exists and maintains its normal functions

so long as the nervous system maintains its integrity; it ceases to exist when that nervous system is disintegrated by disease or by the death of the body.

I have now presented the argument for materialism. Let us examine it. At the outset, the materialist must be reminded that material being is a theory, a metaphysical belief, not a fact of direct knowledge or a datum of experience. Matter is hypothetical; and the materialist can establish its actual existence only if he can show that it alone affords an adequate explanation of the facts of experience. When, therefore, the advocate of materialism describes matter as that which is manifest to our senses, he begs the whole question; some kind of being doubtless is manifest to our senses, but of what sort this being is, our senses do not inform us.

Coming next to the proof of this doctrine which the materialist derives from science, we may ask, Does science directly support the doctrine of materialism? Are the basal concepts of physical science identical with the material being of the materialist? It must not be overlooked that some of the best representatives of scientific opinion distinctly repudiate the doctrine of materialism; others are distinctly idealist in their metaphysics; most scientists to-day regard the problem of the nature of ultimate being as a subject which transcends the limits of science; science is not concerned with its solution. It would seem, therefore, that the materialist cannot claim the direct support of science; for science is as compatible with the doctrine of idealism as with materialism.

If we critically examine the materialist's conception of matter, we shall not find it so clear, so intelligible and self

consistent as it has been assumed to be. The search for the ultimate constitution of matter has as yet not reached its goal; the latest speculations on the basis of physical science lead toward a conception which is so far removed from the conception of the first materialists that we seem justified in expecting that the final outcome of this speculation will be the reduction of the materialist's matter to the status of a phenomenal expression of some kind of being which cannot be thought in terms of matter. The term no-matter-in-motion would seem to be the best definition of this final conception of matter. It would appear then, that the very attempt to reach a satisfactory conception of matter carries us to a something which is other than, and beyond that which we know as matter; matter becomes phenomenal and the basal reality must be sought elsewhere.

But, were the materialist more successful than he is in his conception of material reality, is the relation he assumes between mind and body, namely, that mind depends upon material processes for its existence, the only admissible inference? What is the fact from which this inference is drawn? The absence of any evidence of the continued existence of mind when the material processes with which its activity was connected has ceased? Two deductions are possible from this fact. 1, mind has ceased to exist, 2, mind no longer *manifests* itself, in the absence of appropriate media of manifestation or expression. In other words, we may conclude from this fact, either that mind depends upon a material organism for its existence, or that it depends upon this organism for the *transmission*, or expression of itself.

May not the reply to the materialist be, One is not bound

to conclude that mind has ceased to exist when it has ceased to express itself in the only way in which we have known it to manifest its existence. The absolute dependence of the mental on the material is not the sole legitimate conclusion from the facts of experience. Unless the materialist can show what is the nature of this assumed dependency, his inference that it is on the side of mind only and is absolute, may fairly be challenged.

This leads to the crucial point in the materialist's doctrine. His theory requires that the relation between mind and body shall be conceived as one of causation, this causation being on the side of the material process; the material must be always the cause, the mental always the effect. But now, how will the materialist conceive the causal relation itself? Will he accept the scientific meaning of cause, which is that of invariable antecedence? If he does accept this meaning of the causal relation, how can he establish his thesis, that matter is always the cause of mental states? The only evidence he has to support his proposition is experience; now experience affords just as much evidence for the proposition that mind is in some instances the cause of body states as for the proposition that body processes are the cause of mental states. Bodily movements and internal changes as regularly follow upon certain mind states as do mind states upon certain body states.

Or will the materialist insist that causation is more than invariable antecedence in a phenomenal series? Will he maintain that there is a dynamic transaction of some sort, the expenditure of energy, when the event called effect occurs? If so, then when a mental event occurs, there should be the disappearance of a determinable quantity

of energy in the physical series; but this is not the case. The law of the conservation of energy holds true of physical events only, but not between the physical and the mental events; the latter are outside of this dynamic order, they are epi-phenomenal incidents to a process of which they form no integral parts; consequently the law of causal connection in this meaning of the term does not apply to the relation between the mental and the corporeal states.

This conclusion which seems inevitable carries with it the overthrow of materialism. The materialist seems to be forced to admit that the only relation that to our knowledge exists between the mental states and physical processes is one of parallelism or mere correspondence or concomitance; and this admission is fatal to his argument. Thus it appears that in whatever way we may interpret the relation between mind and body, materialism derives no support from the facts of experience. The conclusion of the matter would seem to be, that on theoretic grounds, materialism is not susceptible of proof.

But difficulties of another sort confront the theory of materialism. The materialist assumes that matter exists; it is therefore a known object or an object of thought. Now, the necessary presupposition of a known fact is a knowing mind or a knowing process. Is not then the materialist placed in the following dilemma? In this knowing of matter there must either be a knowing being which is distinct from material being which is the object, or this knowing is merely a function of matter, in other words matter knows itself. Now, if the materialist admits the real-being of mind, the knower, we have seen he cannot prove that this being is dependent upon matter for

its existence. On the other hand, if the materialist says this knowing is but a functioning of matter, then by this identification of the mental and the material, he has brought a contradiction into his own definition of matter, which clearly distinguishes it from mind; if both mind and matter can be defined in the same terms, there are as good reasons for formulating material processes in terms of consciousness as there are for the materialist's formulation. Cannot the materialist fairly be challenged to define his matter in any other terms than those which connote mental states, or conscious experience in some form? What meaning can be given to the qualities of matter or its modes of action, which does not either reduce them to mental states, or make it necessary to presuppose mental states in order to make qualities and actions intelligible?

But to these difficulties of a theoretical character must be added far more serious difficulties. These are the practical consequences which it is held strictly follow the acceptance of materialism. Man is preeminently a practical being; his supreme interests lie in his actions and their consequences. His feelings, his purposes, his hopes, and aspirations are really significant and valuable parts of himself. Now, the plain consequence of this fact is, that no philosophical theory however satisfying to merely theoretic interests it may be, will seem rational if it leaves this major part of man's nature unsatisfied; still less will it be deemed rational if by implication it deprives these supreme interests and values of objective support. Man's ethical and religious valuations and ideals are interests of this sort. Now, if the real world is such as to deny these supreme capacities and demands all relevancy, all justification, must not the result

be disastrous to the moral life and to religion without which man would hardly be man?

In the real world of the materialist, can there be ethical values, the distinctions, good, evil, right, wrong? Can obligation, responsibility for conduct, judgments of regret, remorse for wrong-doing, approbation for right-doing—can these things really have a place? Must they not be relegated to the sphere of illusions, of groundless fancies, mistaken judgments, and needless fears?

In a world where nothing could happen but what does happen; in which no action could be other than it is, the conditions are wanting on which morality rests. Unless there are real alternatives presented for our choice, unless we stand before possibilities which remain open until our own act has made one of them actual, while the others are left as things which might have been, our action is not moral. Now, materialism makes truly ethical situations impossible; it does so by eliminating in its world scheme alternative possibilities. In its world everything is predetermined. In such a universe there are no moral actions —only blind purposeless actions really take place in such a world. The universe of materialism can, therefore, know nothing of good and evil; it must be indifferent to all that our morality signifies, it cannot respect moral purposes and ideals, its processes can have no relation to moral ends. Thus, are the consequences of materialism absolutely subversive of morality; and morality is the supreme interest of our life.

Now, can the materialist meet this difficulty? If he is to maintain his doctrine he must show that the facts of ethical experience are no more denied or their meaning

destroyed than are the facts of sensation, perception, thinking, feeling, etc. Our moral perceptions, feelings, judgments, and actions are mental states distinguished from others by certain special characteristics, the peculiarities of these mental states or experiences are marked by the term of valuation, good, evil, ought, remorse, etc. These moral valuations, the feeling of duty, the emotions of remorse, these modes of our experience and conduct, the materialist contends remain wholly unaffected by any metaphysical theory whatsoever. The field of morality is our human life; this life in no wise depends for its meaning and value upon what may be the nature of the extra-human part of the universe. This extra-human universe in an ethical respect in no wise concerns us; whether it is good or bad in no wise determines whether *our* lives shall be good or bad. Whether there is a Power not ourselves which makes for righteousness, or in the other direction in no wise affects the meaning or validity of our moral distinctions. Our actions are good or bad according as they are adapted to promote or to affect in the opposite manner human welfare. Our interest in human well being is the sole ethical motive.

The only consequence, says the materialist, it is legitimate to draw from materialism, is the relatively short duration of human life; the life of the individual is indeed fleeting and transitory; but the life of the species is of possibly immense duration; and morality being a social interest, the importance of the individual is his contribution to the social good; his immortality is his influence upon the lives of those who come after him; and to live that others shall be made better by our influence is certainly a high ethical

motive; indeed what motive can be worthier? Of course there is no immortality for the race; the extinction of human existence though a very far off event, appears to be the destiny that awaits us; human history is but an episode in the vaster life of the cosmos. Materialism does not permit man to flatter himself that he is the heir of all the ages, or that his destiny is the goal of creation; but while he is here he can give to his life a supreme value; this valuation is true for him while he lives, and it is quite consistent with the fact that his being is bound up with material processes and relative to the life time of the universe is of short duration. It is not in length of days that the true measure of man's life is found, but in the meaning, the value, the greatness, of the actions, passions and ideals that fill his days; and which animate his life.

Thus, will the materialist reply to the charge that his doctrine is destructive of morality.

Is this defense of his doctrine sound? Some will say that it is specious only and when more deeply scrutinized, is seen to be no answer to the ethical objection to materialism. Others will think differently. It will be said, a man leads an immoral life not because he has first accepted the creed of materialism; he seeks rather in materialism a justification of his abandonment of morality. A man's philosophic beliefs grow out of his life. They have their roots in his inborn proclivities, in his acquired tendencies to this rather than to that way of thinking and of acting. It is the man who determines his philosophy, not his philosophy which determines his life, Fichte's words are true. "The sort of philosophy a man has depends upon the sort of man he is."

To this may not the rejecter of materialism reply? "Philosophy and life react upon each other; and if both are taken seriously they must eventually be brought into accordance. If the materialistic philosopher still maintains the supremacy of moral values he does so against the tendency of his philosophy; his ife is better than his creed. If the moral order is no deeper fact than the wills of his human fellows; and there are in his universe no higher elements than beings like himself, can he justify his ethical ideals, his reverence for moral law, the unconditional claim of duty? Must not the man sooner or later discover this discord between his moral life and his conception of the basal reality of things; and if he thinks to the end of the matter, must he not reach the conclusion, that ethics must seek justification in a different conception of the world, or be abandoned altogether?"

I have presented the ethical objection to the doctrine of materialism and the materialist's answer to this objection. It is better I think that the student should here exercise the philosophic mind, which gives its judgment only when the evidence is all in, and which is not afraid to suspend judgment when it cannot clearly decide.

I will now pass to the other part of the practical difficulties which materialism encounters, the consequences of materialism for religion. Whatever else religion signifies, one thing is of its very substance and cannot therefore be left out, the destruction of which is the destruction of religion. This basis of religion is the conviction that there is some Real Being of such power and disposition toward man, that man can entrust to this Greater Being whatever is most precious and most dear to him, the interests of his

life he cannot by his own power satisfy, the fulfillment of his wishes, the realization of his aims, the maintenance of his life. Religion, to the religious man, is no merely subjective affair, no communion between man and his better self, no projection of his possible self as an ideal object of worship and loyalty, no deification of man's wants and wishes; it is of the essence of religious belief to claim objective reality for its object. The moment that the religious believer is convinced that this object has not the existence and character he has conceived it to possess, that moment his religion loses its vital breath.

Now materialism deprives religion of this objective basis, and by so doing, takes away the justification of religious faith. A man can be moral in a world in which the highest beings are himself and his human fellows; for morality is essentially a relation of conduct within our human world; but a man cannot rationally be religious in the universe of the materialist; he is without God in such a world. Now, I think the clear thoughted materialist will frankly admit that materialism carries these consequences for religon. But he will maintain that in doing so, his doctrine does not destroy human values; it only shifts their locus and their relative emphasis. He will maintain that the transformation of values, the shifting of human interests to other planes, the change of direction it involves of human actions will leave our human life not the less significant or the poorer in interests, but make it a more serious, responsible, and serviceable thing to live. Emancipated from superstitions, from mystical explanations, from useless problems, man can give himself to the work of making better the world he knows, and which he can change by his action. The

riddles of his destiny will be dismissed; the fears of hell will not distress him to no ethical purpose, nor the dreams of heaven lure his mind away from the concerns of his present life. Man will concentrate his practical thinking upon the problems, the task of making the life of the individual and the common life the better for every man's personal contribution. Man will act with clear vision and more earnest purpose in the living present, when he truly believes "the night cometh wherein no man can work." Nor will his life be robbed of emotional stimulus and the inspiration of ideals and hopes. There is nature, illimitably vast, incomprehensibly wonderful and beautiful in its ever varied forms. Cosmic emotion will take the place of religious emotion, and its value for life may be quite as great. The enthusiasm for humanity will take the place of religious passions that have been quite as baneful as beneficent in man's history. The service of humanity under the inspiration of an ideal human society here on the earth, will be no poor substitute for the service of God, so often made the substitute for the doing of duty to our fellow men; and likewise it will be the substitute for the anticipation of another world, so often making us willing to let wrongs in the present world go unredressed, sorrows and woes unrelieved, wants and misery and crime unheeded. In this way will the materialist, while admitting the distinction of what is properly religion, try to maintain that our human life would not lose in value, when once this adjustment to the new conception of the world has been made.

III. IDEALISM

We pass now to the theory of reality which is most opposed to the theory of materialism, idealism.

To begin with the general doctrine. The fundamental proposition of the idealist is, real being in its ultimate form is mental; it is conscious experience in some form. Consequently, what we ordinarily take to be material being exists only as phenomenal manifestation of mental being.

The proof of this doctrine is the following: 1. This conception of real being results from a consistent attempt to define clearly our meaning of real existence. "We perceive," say Bradley, "that to be real or even barely to exist, must be to fall within sentience. Internal experience is reality, and what is not this is not reality. Find any piece of existence, take up anything that anyone could possibly call a fact, or could in any way assert to have being, and then judge if it does not consist of sentient experience. Try to discover any sense in which you could continue to speak of it, when all perception and feeling have been removed. When the experiment is made steadily, I can myself conceive of nothing else than the experience." In the same strain Royce says, "Nothing whatever can I say about my world yonder that I do not express in terms of mind. What things are as extended, moving, colored, useful, majestic, etc., what they are in any aspect of their nature, all this must mean for me only something that I can express in the fashion of an idea. It is impossible to define a material being save in terms which presuppose mental being. Whatever qualities we give to matter imply a relation to our mental experience. Matter is unthinkable, undescribable except in terms which connote mental

experience of some sort. If there is real being which is other than mental the nature of that being is absolutely undefinable, unthinkable."

2. The same conviction concerning the nature of what is red results when we examine the relation of the idea to its object in thinking and knowing. An idea which can be true or not true must aim at, must intend to be true of that object and no other object. Now, in order to mean or intend any particular object, the idea and its object cannot be foreign to each other; the relation between them cannot be merely an external one; it must be internal and consequently the object which the idea seeks must be homogeneous with itself. Again, if we examine a cognitive idea, *i.e.*, an idea which seeks truth, we shall find that it is essentially purposive, it is a will-act at the same time that it is cognitive; hence the fundamental relation of such an idea to its object is that of a purpose to its realization, an intent to its fulfillment. The object in its nature, therefore, cannot be other than the idea; it can only be rightly defined as the more complete and determinate expression or embodiment of the idea itself. In thinking and knowing our ideas but seek their own, not something which is alien to their nature. If then our ideas are to be true, and we are to possess knowledge, their objects must be of the stuff ideas are made of; the alternative is either the mindlike nature of the real world, or we possess no knowledge of that world; in other words the alternative is either idealism or the unknowable.

Having stated the general doctrine of idealism and the proof of it, I will next proceed to a somewhat detailed exposition of two typical forms in which this doctrine is held. The first is the famous doctrine of Bishop Berkeley.

Berkeley's idealism is of the simpler type and is set forth in the two writings, *Principles of the Understanding* and the *Dialogue between Hylas and Philonous*. The substance of this idealism is Berkeley's explanation of the external world. Physical reality is the main problem for idealism just as mind is the crucial problem for materialism.

I shall therefore present an idealistic explanation of nature or physical reality which follows closely the lines of Berkeley.

Nature presents two distinct classes of facts: (1) individual objects which exist in space, are external to ourselves and to each other, which we believe exist when no mind perceives them, and finally which are relatively permanent and which seem to act in various ways upon each other. (2) Nature as our science conceives it is a system of causally connected phenomena; these phenomena in their ensemble, take place in accordance with uniform and universal laws. The order of nature appears to be unchanging; and every change within nature absolutely predictable, given as known its antecedent conditions.

These are the two classes of facts which any theory of reality must explain. Now, what explanation does the idealism of Berkeley give of these facts of nature?

To begin with material objects and our perception of them. Let me suppose I am now perceiving an object, say a flower. Here are two questions: (1) Just what is it I perceive in my perceiving this flower? (2) In what consists this perception of mine? The Berkeleyan idealist answers the first question after this manner; "The flower which you perceive is not something which exists apart from and independent of your experience or the experience of some other mind. If you will define this object by stating each one of

its so-called qualities, you will find your definition is simply a description of your own particular experiences, sensations, ideas, etc. Take the color of the flower, let it be blue; what do you know of this blueness of the flower, but just this definite sensation experience which you have just at this time? Take the form of the flower; what is your knowledge of that, or rather what is that form as known, but a special mode of your experiences, an order of your sense impressions? The odor of the flower, can you find anything in that which is not another special sensation? To sum up, can you find in this flower as perceived by you anything which is not definable in terms of sensation, or idea, or some other mode of your experience, actual or possible? Of course these various sensations are each definite in quality, in intensity, and they coexist in a definite combination or complex, so that you can describe your present perceptual experience by the statement: I have here and now this particular complex of sensations, ideas, etc. Now, is it not a true statement of the fact, to say that this particular piece of the external world named flower, proves to be nothing other than the stuff ideas are made of; a wholly mental thing, having no extra-mental existence whatever? It exists when it is perceived and as it is perceived; indeed, its *esse* is *percipi*." But, suppose I reply, "This flower must be something other than a mere complex of sensation; for you also and others can see this same flower at the same time that I am perceiving it; and if I go from this place, when I come back I perceive again this same flower in a perception that is numerically distinct from the first perception. This flower did not begin to exist when I began to perceive it; nor would it cease to exist did I never perceive it again.

Therefore, this flower must be something which can exist independently of my perception and of the perception of any other human mind at least; and consequently it cannot be truly said of this flower, its *esse* is *percipi*." To this our Berkeleyan will answer, "You are right in your contention that there is something more involved in the perceiving of this flower, than just this fact of your having this particular sensation-idea-complex here and now. There is other reality than the flower-reality; but this other reality is not some part of the flower, some substance or flower in itself, which you do not perceive. You *do* perceive all the flower object there is to be perceived; this other reality is that we conceive or suppose in order to explain your present experience, why you have just this sort of experience at this particular time. This other reality also explains your belief that other minds could have the same experience were they present, and that this flower exists when you do not perceive it, and your belief that its existence is not dependent on any mind's perception of it. Now, the Berkeleyan continues, "that other reality I call God; for the main proposition of my idealism is, that only God and finite minds exist as real beings. Accordingly, my theory supposes that God as the Universal World Spirit in whom we live, move, and have our being as percipient minds, in this present instance, of your perceiving this flower, so acts upon your mind as to cause you to have just this definite sort of experience, the complex of sensations, which the name flower connotes. We can say that, in some sense of the term, this flower exists for the Divine Mind; it exists there as an element of his experience, a meaning of some sort, which is embodied in your perceptual experience. Thus is this

particular experience of yours explained. The objective reality of it is this special form of the Divine action upon your mind. We do not need to suppose a flower in itself, existing when not perceived, a something we know not what, called material substance; on the contrary, the something here supposed is conceived after the analogy of our own minds; it is a being which is thinkable, and which is endowed with powers of acting analogous to the powers we know in ourselves. You are right in your conviction that your own mind is not the cause of the sensations in the case of this flower. You are wrong in thinking that the cause of your experience is some unperceived essence or part-reality of the flower as a material substance; for so to interpret your experience is to suppose that something the nature of which is by your supposition wholly unlike your own mind, is, in some way, acting upon your mind. Now why should you assume such an unknown entity instead of a Being who is after the type of what we know?"

But how will our Berkeleyan explain the fact that other minds perceive the same flower I perceive. Let us suppose that a hundred minds perceive the same flower, must there not exist a hundred Berkeleyan flowers at the same instant, and all these flowers scarcely more than numerically distinct? Instead of a hundred different minds perceiving one and the same flower, there must be according to the Berkeleyan theory, a hundred flowers simultaneously created—formed in a hundred percipient minds. To this the Berkeleyan will reply, "This fact of acquiring perceptions on the part of a hundred minds is no more of a puzzle upon my theory than upon the theory of the independently existing object. According to both theories, one and the same being is the

cause of the perceptive experiences of these hundred minds. The theory of dualistic realism explains this fact of agreeing perceptions by the action of a material object upon all the minds; while my theory supposses the same Divine Mind acts in the same manner upon these separate minds."

The Berkeleyan readily admits that his theory does not explain how these one hundred minds each of which must have his own experience distinguishable in various particulars from the experience of other minds, can nevertheless make their experiences mean the same thing, in this case the same flower; but he contends just as little can the other theory explain this fact; for the mere existence of a single flower does not explain the knowledge of this object by these minds. No, the problem of many minds having a common object is the problem of social consciousness; and can be explained only when we understand how the individual comes to have a social consciousness; the solution of this problem falls to Psychology. But suppose I object to the Berkeleyan theory, "When I close my eyes I no longer see the flower, when I close my nose I do not smell it, when I turn away from it, it is no longer my object; but other conditions remaning unchanged, I know that should I return, I shall again have the same perceptive experience. Now I cannot persuade myself that the flower has ceased to exist in the interval of my going away and returning, or when I close my various senses. My behavior in closing, etc., turning around, going away and returning, seems in nowise to have affected this flower; these my ways of treating the flower, I must think are quite accidental to the flower which continues to be beautiful and fragrant during all my changing behaviors toward it. Is it not absurd to suppose this flower ceases

to exist when I no longer perceive it? But this is what your theory seems to require me to do." The Berkeleyan idealist meets this difficulty in the following way: "Your belief in the continued existence of the flower when you do not perceive it, has its psychological origin in your repeated experience, that under the same conditions the same experiences come again. The time was when you believed that the sun no longer existed when you did not see it. Apart from the teaching of older people, your belief that objects exist when not perceived, grew out of your experience of having the same perception after the interruption of the course of your experience. The root of your belief in the continued existence of objects when not perceived, was, then, your belief that you would have, or could have the same perceptions again. Now, you have come to justify this belief in the recurrence of the same perceptions by the additional belief in a continuously existing object; this object fills the gap in your perceptions, and gives the desired continuity to experience. Now, in the place of your continuously existing object—say the flower, my theory puts the ceaselessly acting Divine Mind or World Spirit; who, in accordance with his world plan, we may suppose, always excites in our human minds the same perceptions under the same conditions. My theory therefore explains and justifies your belief in the permanent possibility of your perception of the flower. Let us suppose, if you will, that all human minds were suddenly to vanish; this flower would still remain in the sense of a possible perception; it would continue to exist for the World Mind as an element of meaning in his World Thought." But suppose I continue, "My difficulties are by no means at an end.

What of my various behaviors in the presence of objects, the actions I perform upon them, their actions upon me and other objects? This flower I perceive, I pluck it, tear apart its petals, scatter them upon the ground. I place my hand against a stone, it resists my efforts to change its position; I overcome that resistance and roll it down the hillside; or a stone rolls against me and I feel pain. I put my hand into a flame, it is burned. Now, if material bodies are only complexes of sensations and hence exist only in our minds, how explain these undeniable facts of experience? Should not a consistent Berkeleyan put his hand into the fire, or run his head against a post, or dash his foot against a stone?" The Berkeleyan's answer is, "Human minds do not consist of sensations, perceptions, or ideas merely; nor do these experiences occur in isolation from other experiences, the contents of which are affections, emotions, striving, purposing, choosing, etc. The human spirit is a being which thinks, feels, and acts. That part of our total experience we call sensations, or perceptions does not exist apart from other forms of experience, especially the affective and active experiences of motion, striving, and willing; each perceptive experience is interlinked with various other states and activities in such wise that some other kinds of experience may precede and lead to a perceptive experience. Take again the perception of the flower; we can suppose a series of experiences of various sorts came before this particular flower-perception experience, such as reading a book in your study, with resulting fatigue, or restlessness, or dissatisfaction with your present situation, following this, a purpose to go out for a walk, then the walking experience, various motor states and

accompanying and resulting sensations, feelings, etc., till the series terminate in this specifically accentuated experience of seeing the flower. Now, the meaning of all this is, There is a certain order or context in which each particular experience of any sort always occurs; this experience is always preceded by something, always accompanied by something and always followed by something. Now, with this fact in mind, cannot you see a ready explanation of the facts you have suggested? Cannot the entire transaction, with the stone for instance, be described in terms of mental experience? What more is this seeing, grasping, lifting, and rolling a stone but a definite series of visual, tactile, motor resistance, strain, sensation, experiences with accompaniments of other experiences, partly sensational, partly feeling, partly volitional experiences? To put my hand in the flame, is to have a definite series of sensations, followed by motor states, these by a complex of sensations—perceptive experience in which a very prominent component is a massive pain-sensation-complex." The consistent follower of Berkeley will no more run his head against a post, or dash his foot against a stone than would the staunchest metaphysical realist; and he will not do this, for the same reason that would prevent the latter from so acting; namely, the undesirable kind of experience which he knows would follow his action; he has learned the nature of these consequences in precisely the same way as the realist has learned them, namely, by experience, either his own or that of others communicated to himself. In this way does our Berkeleyan explain the various experiences of action, and our various transactions with so-called material things. But bodies act upon each

other, they change each other's condition or status. Two billiard balls meet and the result is a change in the direction of motion; a blow with a hammer breaks a stone, changes the shape of a piece of metal; a flame melts a piece of wax, or changes water into steam. How explain such phenomena, unless there are actual existing material bodies, capable of dynamic transactions? But here again as in the other supposed cases, the anti-Berkeleyan will find he cannot describe facts in other terms than those in which the idealist describes them. He differs from the idealist solely in his interpretation of these experiences. Must he not admit that in their explanations, the Berkeleyan keeps closer to the actual facts of experience? For he supposes but one operative Being; and he conceives the nature of that being in terms of a reality he already knows, namely, conscious mind, fundamentally like his own mind. The realist on the other hand must admit that he has no positive knowledge of non-mental being. And consequently, in the last analysis, his theory is an explanation of the known by means of the unknown.

But once more, what can the Berkeleyan make of our human bodies and the connection between the body and the mind? To be specific, how will the Berkeleyan answer the following questions: 1. How can I distinguish my body from my mind? 2. How can I distinguish my body from the body of my fellow? 3. How do I know the mind of my human fellow? 4. Were my mind to cease what would become of my body? Our Berkeleyan idealist has a ready answer and it seems to him a sufficient answer to these questions. "As to the body," he answers, "My body, as an object merely, differs in no respect from other objects;

the sole circumstance which constitutes its peculiarity, is its functional significance; my body is a manifestation of my mind to other minds; it is a medium of intercommunication with the minds of my human fellows. Now this function of manifestation and social communication is made possible by the circumstance, that the body of each individual is more intimately connected with his own mind than is any other object. It is owing to this intimacy of connection between what I call my body and my deeper, more interior self, that my body can be the revealer of myself to my human fellow, and his body be a manifestation to me. And it is also this more intimate connection between my own body and my mind, which enables me to distinguish my body from objects which are not bodies, and also from the body of my social fellow.

"And this gives the answer to the second question. I am able to distinguish between my body and your body, because the perceptions which mean my body are more intimately connected with my interior life than are the perceptions which mean *your* body.

"And this leads to the answer to the next question, How do I know your mind? This same connection between each one's body and his mind makes it possible for my body on the one side, and your body on the other side, to constitute a medium or sign language for communication between our minds; the various actions, expressive movements, speech, gestures, etc., are a language essentially of symbols, by means of which I am able to know your mind, and you to know my mind. This will become perfectly clear if we analyze the fact of social communication. In my perceptive experience there occur two closely resembling complexes of

sensations, perceptions, etc.; the one of these complexes stands for my body, the other for the body of my neighbor; my own body complex has as its correlate certain ideas, feelings, purposes, etc.; the complex which means my neighbor's body is made up of elements which very closely resemble those which constitute my own body; I therefore project as it were, behind my neighbor's body, mental states, and experiences of the same sort as those which are connected with my own body; my neighbor's mind is thus an object which I am led to make on the basis of my experience, and which I have so repeatedly and in so many ways verified, that I have come to be as certain of his mind as I am of my own mind."

To the last question, "Were my mind to cease what would become of my body?" the idealist's answer is; "Your body would for the time at least, continue to exist as other objects exist for other minds; and did it undergo certain changes, that fact would indicate to these minds, that your mind had ceased to have connection with that group of perceptions which means your body."

Such is the Berkeleyan idealist's explanation of the individual objects which constitute the external world or nature.

We will follow him next in his solution of the second problem of physical reality—the problem of the universe as Science knows and conceives it. To begin with the first great feature of our universe, order, uniformity, and causal connection. Reflection leads to the conviction that this uniformity and causal connection are the foundation stones on which rest both the splendid structure of scientific knowledge, and our practical knowledge and control of

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nature in the service of life. Nature thus presents the character of unchanging law, of mechanical necessity. This behavior of the physical universe is in every particular the opposite of that which we are accustomed to associate with mind, and points rather to non-mental beings which are the basis of this non-mind-like behavior, so alien to our minds, so indifferent to our human interests, so baffling to our efforts to find in it the evidence of a mind like our own. In meeting the objection to his doctrine which this seeming unmind-like character of nature presents, the Berkeleyan in the first place, will remind us that undeviating regularity and mechanical connection are not known to be absolute features of the world structure. All that physical science has verified are certain routines in the occurrence of events, in the phenomenal happenings of nature. And this routine character of our experiences represents at most but a fragment of the whole; it is a selection out of a vastly more extended realm in which, could it be seen in its entirety, no such dead uniformity and mindless mechanism would appear. But, again, is it not the aims of our science, the needs of our rational action in the world which impel us to seek for just this constancy of behavior, this universality of law in our world; and even to postulate this character of the world beyond the limits of what our own experience verifies? Nature seems to respond to distinctive mental needs and to deal with us in a mind-like way; and this fact indicates that the sub-structure of the empirical universe is after all a mind-like being. The Berkeleyan idealist can go farther and challenge the assumption that the uniformity immutability, and the undeviating order of the world are marks of non-mental being. Mutability, irregularity, in-

stability are the accidents of mental being, due to its finite and conditioned existence, its limited knowledge, its defects of will. The mind which knows all, and possesses all power and is perfectly good, need present no variableness, no shadow of turning. Even within our human world there are such things as unchanging ideas, stable purposes decisions that remain fixed, loves that are as constant as the stars, hates that never die, and decisions that are irrevocable. Now the World-Mind which this theory supposes, is too wise to need to alter his plans, too powerful to be successfully opposed, too good to change his purposes. And this World-Spirit, acting in accordance with his world plan, affects our minds with just that measure of uniformity and undeviating order which we verify in these experiences we call nature. Uniformity of nature, causal connection, are the divinely ordered course of one's experience. The basal reality of nature is the constant will of the World-Spirit.

There are two other features of the scientific conception of nature which offer more serious difficulties for Berkeleyan idealism: (1) The conception of cosmic beings and cosmic processes in time before the appearance of our human minds and in regions of space where they do not exist; and (2) the conception of evolution. Our world is a world still in the making; it has had a very long history, its future is possibly endless. It is not, however, this long time the world has lasted or will last; it is rather the fact of an incessant, continuous change and continuity of process which creates the problem for the Berkeleyan idealist. The world process is one of evolution; and the long chapter of cosmic history which science constructs, is filled with events, with the play of stupendous forces, with momentous changes, with evolution

processes, all of which were finished before the advent of our human consciousness; and science conceives of like processes of evolution now going on in regions where there are no human percipients. More than this, fossil remains of plants and animals force us to assume the existence of species which are now extinct, but which are the ancestors of existing species. The geologic record seems to make inevitable the induction that organic nature at least has an existence which is other than mere ideas, and merely possible perceptions. Now, the Berkeleyan philosopher must maintain that this evolving cosmos, these objects of scientific imagination are real in no other sense than is the flower in our first illustration, or the star we think of as shining millions of years before any human mind existed. By an imagined extension of our possible experience backward to the beginning and into the vast stellar regions, all that our science pictures would have been actual perceptions. For the world is as old as the world of evolution; and had we been there, the first stages of this ideal evolution would have been embodied in our concrete experience. The primeval ocean, the first land, the formation of the rock masses, the elevation of the mountain chains, Pterodactyls, Ichthyosaurus, Megatherium, Mastodon, etc., would have existed for us just as the flower, the star of our present perception. For the world mind has the world plan complete in all its details. This plan includes, therefore, as possible perceptions, just these objects and cosmic events which our science describes; the Megatherium, the Mastodon which the palæontologist constructs from data of present experience, are the objects we would perceive could we go back in the time order of experience to the point in the

development of the World-mind's plan where such beings belong.

In this way does the Berkeleyan idealist explain the world of science.

Now, what shall be said of this theory as a whole? It has been said of it, "This is a theory no one can disprove, but it is also a theory no one can really believe." The theory will always be incredible to the plain man and to the so-called common sense philosopher. It runs so counter to strong realistic prejudice. To resolve that most indubitable reality, matter into mere perceptions, is for these minds, to turn the external world into a phantasmagoria. It would be about as easy to persuade the realistic mind, that after all, we are all dreamers, and our external world is veritably the stuff dreams are made of, as to lead this mind to accept the Berkeleyan idealism.

Another circumstance tends to make this theory incredible. It is the embarrassment it occasions when we try to translate the ordinary, the everyday sense experiences into terms of this idealism; and this embarrassment only increases when we attempt to interpret the scientific doctrine of the universe in terms of this theory. The geologic past, the regions where no percipient minds exist, the transactions between things which we are constrained to regard as independent of our minds. Let anyone try to make these facts intelligible or realizable in the Berkeleyan theory of nature, and he will appreciate the strength of the prejudice which our familiarity with scientific conceptions has fostered. Any theory will seem irrational if it thwarts or obstructs that easy and smooth flow of our ideas, that harmony with

the obvious facts of experience, which we are wont to regard as the mark of rationality.

Still another circumstance tends to make the Berkeleyan idealism unacceptable. If, as this doctrine teaches, God is the immediate cause of every perception in every individual mind, he must cause at one and the same instant, contradictory perceptions; for such contradictory perceptions do undeniable exist, and unless a greater degree of spontaneity is to be attributed to our human minds, than this theory seems to assume, the sources of these contradictory perceptions must be God. And finally as Descartes pointed out, does not this theory attribute to God systematic deception in causing our perceptions in such a way that we irresistably refer them to external objects? Only the philosopher is able and to emancipate his mind from this false impression; the common mind remains the victim of persistent illusion. Surely, if Berkeley's God intends to lead our thoughts to him, he takes a strange way to effect his end.

The second type of idealism to which we will now turn, avoids, it is maintained, these difficulties which make the Berkeleyan explanation of our external world incredible. I will first state the explanation of nature-reality, which is found in Professor Royce's remarkable book, *The World and the Individual*, Volume II.

In nature, we are not dealing with non-mental, unconscious beings, but with phenomenal signs of vast conscious processes, a vast realm of finite consciousness; a mental life wherein ideals are sought, goals won. "The finite experience which is the reality of inorganic nature, is one of an extremely august temporal span, so that what we take to be a material

region, say a nebular, is the phenomenal sign of the presence at least of one fellow creature who requires perhaps a billion years to complete a movement of his consciousness, so that where we see in the signs given us only momentous permanence of fact, *he* in his inner life is facing momentarily significant changes." The phenomena of these minds may sustain the same kind of relation to these cosmic minds that our bodies sustain to our minds; they differ so widely from the bodies of our human fellows, that we cannot by means of them derive the mental processes they signify as we do in the case of the bodies of our human fellows. The nature minds, therefore, are non-communicative; but we cannot infer from that fact that they are not in significance, or rationality or dignity equal or even far superior to our human minds.

The significant features of this idealistic theory of nature can be best brought out by comparing it with the Berkeleyan theory. The points of difference are the following: (1) Nature-objects in Berkeley's doctrine are perceptions in our minds; as objects they have subjective existence only. In the Roycean theory, nature objects, it is claimed, have objective existence as truly as do minds of our fellow men. (2) In the Berkeleyan world, objects of perception exist only when perceived; in the world of Roycean idealism, these cosmic objects, it is maintained, exist when no human mind perceives them. (3) In Berkeley's doctrine, the order of nature exists in the divine mind; it is but the constant and uniform manner in which this mind affects our minds. In the Roycean idealism, the order of nature has an existence objective to our minds. (4) Material objects in Berkeley's theory are really illusions or hallucinations; in

the idealism of Royce our perceptions have an objective basis which corresponds to them.

This theory does seem to have decided advantages over the theory of Berkeley, and to give a more credible explanation of the external world. But, on more critical examination, does it not encounter difficulties which are hardly less serious than these which make it so hard to accept Berkeley's doctrine? For instance, what sort of an existence is to be attributed to such objects as the sun, planetary bodies, the stars, etc? We are told that these are phenomenal signs of mental processes. These processes must, therefore, constitute the cosmic realities themselves. But do the objects of our perceptions exist anywhere save in our minds? Are these objects anything more than complexes of sensations, ideas, etc? In short, are they not just what objects in Berkeley's Idealism are? To say they are phenomenal signs of something else, is only to designate their function. In Berkeley's scheme, objects are phenomenal signs of ideas, intentions, and rules of action in the Divine Mind. Indeed it is expressly Berkeley's teaching, that nature the visible universe is a vast sign language through which the world spirit communicates with our spirits. Now, will the Roycean Idealist say, "The star I perceive exists independently of my perception and is the excitant or generator of that perception?" Must he not admit that the star as object, is a certain definite complex of present and associated sensations, ideas, etc., an experience content of some sort? If so, then the question which next faces him is, What is the source, the stimulus of this experience which occurs just at this moment? Must he not find it in some deeper, unrecognized part of what I call myself, or in that other

finite consciousness or mental being of whose existence, the star is said to be the phenomenal sign? If it is the present existence of that other finite consciousness which explains my present star-perception, must we not attribute to that cosmic mind the same function which Berkeley assigned to his one World Spirit, namely of being the cause, the exciter of our perceptions? And if so, then in this scheme, do the objects of the external world have any actual existence when they are not being perceived by human minds? And if this question must be answered in the negative, we must ask, does not this theory leave the problem of nature, its unity, its uniformity, its temporal development, etc., just where the Berkeleyan idealism leaves it? The geologic past, the vast realms of extra-human experience—do these have for our minds any different kinds of existence or meaning than they have in the Berkeleyan scheme which gave us such difficulties at these points? Of course, the Roycean idealist's answer can be. Since in the case of such cosmic objects or nebulæ, suns, planets, etc., finite minds of a type other than our minds, are the reality itself, and these mental processes exist independently of our minds, what appear as external objects and the physical universe which our science constructs, being the phenomena of these minds have an objective existence, and therefore an existence when not perceived by our human minds. But does not this idealism admit that what we take to be material nature differs profoundly from these mental processes themselves; and that the physical object which we perceive and which science constructs give only vague hints and fragmentary suggestions of what is going on in other cosmic minds? Now if this is so, does material nature as

we perceive it, and as our human science conceives it have any other existence than as actual and possible, conceivable processes in our human minds? If as the theory holds, nature objects are phenomenal signs of mental processes, the existence of our human minds is as indispensable to their meaning and function as such phenomenal signs, as are the cosmic minds of which they are supposed to afford us indications. It would seem then, in the absence of our human minds, we can no more say what material nature is or would be, than we can say what Berkeley's external world is or would be in the absence of these same minds. May we not conclude that the difference between the Roycean theory of nature and the Berkeleyan theory reduces itself to this one circumstance, namely, in the Roycean Idealism, the many finite minds take the place of the one mind in the Berkeleyan theory?

Of course the idealism of Royce conceives the relation of the Divine as the world-mind to our finite minds in quite a different way from the conception we have in Berkeley's doctrine; and the nature of these other finite minds, their relation to our minds and to the one mind, is a problem which hardly exists in the more naive idealism of Berkeley. But in the matter of our external world, or material nature the Roycean idealist may be fairly challenged to show how his doctrine really escapes the difficulties and objections we encountered in our examination of the Berkeleyan idealism.

IV. CRITICAL OR AGNOSTIC MONISM

Both the theories we have examined assume that real being is either material or mental; but may it not be that the

nature of ultimate being is a problem which transcends our human minds? May there not be a type of being which is neither what we know as mind nor as matter but (to borrow a term from Höffding), the tap root of both? This is the standpoint of those thinkers who call themselves critical, or more commonly agnostic monists. The theory is, that ultimate being in its own nature is neither material nor mental, but a kind of being the nature of which we cannot define, but which we may believe is the basal reality of both matter and mind; the unity of both, the tap root from which spring these two forms of being we know as mind and matter. The proof of this theory is the following: (1) Both matter and mind as they exist in our experience are equally real; neither can be reduced to terms of the other. We cannot explain mind in terms of matter; we can as little explain matter in terms of mind. Taken in their phenomenal aspects, mind and matter are as unlike as dualism maintains. But the intimate connection which exists between these forms of reality, for instance in the case of one human mind and body existence, makes it highly probable to suppose that this duality is deeper than phenomenal; consequently we are forced to the view which regards both what we empirically know as mind and what we know as matter, as the manifestations of a real being which underlies both. (2) To postulate a basal reality of this sort, while at the same time we confess our ignorance of its nature, is no inconsistency as the opponents of this theory usually assert; for it is surely conceivable, that the nature of a being should remain undetermined despite the fact that in certain, to us inexplicable ways, it is the ground of our perceptive experience, and the basal reality which

science postulates. Nor do we need to conceive this ultimate being in more definite terms. The function we assign to it in explaining the external world of perception calls for no more definite conception. To be the permanent possibility of our perceptions, to be the basis of common perceptions, to make social experience possible is the function of this underlying real being, and thus its functional significance to some extent defines its nature.

CHAPTER IV

THE PROBLEM OF THE ONE AND THE MANY

Our next stage in philosophical thinking will be occupied with a problem somewhat closely related to the one we have just completed; but which has to do with a different aspect of the real world. That feature is the concurrence in our world of plurality and unity, manyness and oneness.

The world of our experience is a world of many beings, each showing independence and at the same time all interrelated, interdependent. Of this world of our experience, we say it is constituted of many real beings. But a description of the world in terms of many beings is incomplete; our world is one which possesses unity; plurality does not adequately describe it; oneness is as indubitable a feature of our world as is its manyness. Now, the problem for philosophical thinking is, what are these two facts and how are they to be connected in a coherent and satisfactory world view? It is the old problem of the one and the many which presents itself. Is the world in its ultimate constitution a plurality of independently existing beings, or is the basal reality of the world a numerically one-being, and consequently the many beings of our experience are in their reality, in their essence, only phenomena or appearances of this one and only *truly* real being? Or, is a third view possible, which will preserve real being in the many and at the same time make the one a real being and also original in its relation to the many?

In this statement of our problem we have indicated three distinct doctrines. Let us formulate them in more exact terms.

1. *The Doctrine of Monism.*—This doctrine asserts that original fundamental being is one. The many beings in our world of experience absolutely depend upon this One-Being for their natures, their actions, their experiences. Regarded in their essential meaning they are the modal or the phenomenal appearances of the one.

2. *The Doctrine of Pluralism.*—This doctrine maintains against monism, that it is the many beings which are real, each in its own right, each independent of other beings. These many beings are the fundamental reality of the world. The oneness of the world is the character of the world which is due to the unity of aim, the harmony of activities which characterize the many.

3. *The Doctrine of Pluralistic Monism.*—This doctrine seeks a *via media* between the opposing doctrines of monism and pluralism. With monism, it asserts the real being of the One; and it conceives this being in one sense as absolute. With pluralism this doctrine holds that the many are also real; each with a unique nature and a power of action from itself. But each individual being owes to the One Being its nature and its possibilities of action.

Let us now examine these world views somewhat critically.

I. MONISM

Monism appears in two quite sharply distinct forms. In the one form the nature of the One is left indeterminate. In the other type of monism, the nature of the One is definitely conceived. The classical representative of monism of the

first type is Spinoza, whose famous definition will illustrate this type of monism. Professor Royce, I select as the best exponent of monism of the second type. His remarkable book, *The World and the Individual*, gives the most complete and luminous exposition of the doctrine of monism which has yet appeared.

To begin with the monism of Spinoza. The chief points in this doctrine are:

1. The One or God alone exists as Substance; other existences are modi of this one Substance Being.

2. Our known-real-world consists of two forms of reality, mind and nature, *res cogitans* and *res extensa*. It is in these two forms of being that the essence or nature of God unfolds and realizes itself for our minds. Accordingly we may regard mind and nature as the two attributes of the One Substance; while each individual being is a mode of either one or the other of these two attributes; and inasmuch as these two attributes, mind and matter, express the nature of God as the one substance, each individual mind or material object is a mode of this one substance, God.

3. Since each individual being is thus absolutely dependent upon the one and only Substance Being for its nature and whatever it does or undergoes, each individual is just what the One makes it. Nothing in this world of individual beings and their experiences could be other than it is without a change in the nature of the One; and this is inconceivable.

4. God, the One Substance, being perfect in his nature, possessing every attribute, each one in a degree infinite and perfect, the world is perfectly rational and perfectly good. When therefore, we think we see imperfections and evil in the world, our judgments are false or rather irrelevant;

they are valid only of those appearances which the world presents in consequence of our finite point of view. Our distinctions, good and evil, perfect, imperfect, etc., are not relevant to the real world as it exists for God.

The most important points in Spinoza's monism are his conception of the One Substance God, the relation of God to the world, and the ethical and religious implications of this monism. Taking these points in the order named, we may properly ask, Is Spinoza's conception of the One which he calls Substance or God, free from ambiguity? There are passages in his Ethics which clearly attribute to this being intelligence. God is declared to be perfect intellect; God is the All Knower; nay it is the reiterated teaching of Spinoza that the universe is perfectly rational and therefore perfectly intelligible to one who should have an adequate idea of it. Spinoza declares that man may know God unto perfection; and in this knowledge of God is man's salvation and his blessedness; it is man's chief end to know God and to enjoy him forever. It would seem to be made clear beyond doubt that the One in Spinoza's monism is a spiritual being, and spiritual in the sense in which we know such a nature; for if man can have an adequate idea of God, he knows him as he is, and consequently God is as man thus conceives him.

But unfortunately there are other parts of Spinoza's teaching which assert that the One is not intelligent, after our human type. God, we are told, does not possess intellect; for intellect, as we know it, is finite; and finiteness is inseparable from our human modes of knowing, we can only know in part. Not only does Spinoza deny that God has intellect; but he also expressly teaches that God does not

feel or will, as we possess these functions; God does not love, pity, feel anger; God does not purpose, conceive ends and realize them. Now when we eliminate from our conception of God, feeling and willing in the only forms in which they are intelligible to us, can there remain to that conception any determinate property or attribute whatever?

The conclusion would seem to be that in this type of monism, the nature of the One is wholly indeterminate; and if so, we ask, can the One so conceived, afford any explanation of the many? This brings us to the second point in Spinoza's monism, the empirical world.

In the first place Spinoza's teaching leaves us in no uncertainty as to the kind of existence which is to be predicated of individual beings, minds and things, *res cogitans—res extensæ*. They possess only modal significance. In respect to essence or meaning they are of the substance of the One; just as the radii of a circle exist only as modi of the circle; being in their essence or meaning, one with the essence of the circle. From the point of view of sense and imagination, these radii are separate and individual existences; from the point of view of the understanding, they are only modi of the circle, and have no separate independent being whatever. In like manner does every individual mind, every individual, material being exist. It is to our sense perception and in our imagination only, that they exist as individual and independent beings; who ever has an adequate idea of them, perceives that they are only modi of the one essence, God. And as the nature, properties, and laws of the circle, are made explicit in the circumference, the radii and the various lines drawn therein, so in the individual minds, and material beings which compose the

empirical world, the world of the many, the meaning, the nature, of the *One* or *God* is supposed to be unfolded and defined. Clearly then, the many are in every detail of their being, what the One makes them to be. The One contains the many in such wise that knowledge of the One would at the same time be a knowledge of the many. Such being the meaning of individual being, the significance of the many in their relation to the One, let us see next what consequences for our ethical and religious conceptions of the world follow from Spinoza's monism.

One of the obvious deductions would seem to be, The universe is absolutely determined; Spinoza's doctrine is thoroughgoing determinism. There is nothing contingent in such a world; nothing could be other than it is without changing the nature of the world reality. This precludes the possibility that any human action or human life could be other than it is. The belief that we could have acted otherwise than we did act in any situation, is an illusion, due to our ignorance of the causes of our actions.

A second deduction seems equally legitimate, namely, the universe is static; real being is fixed in an eternal state; it cannot change, for that would imply its imperfection. Whatever meaning there may be left to our time conception, a process in time, is not an experience of the One. The real world is all that it ever will be, all that it can be. What significance, therefore, can change, growth, development have for the One, if indeed we can ascribe consciousness to this being? Shall we say the One comprehends in some ineffable way these characters of reality as we know it, and transcends them? Or shall we say these conceptions have no relevancy for that Being; they are significant and valid

only in our finite realm of being? But how can our thinking then be defined as a mode of the infinite intellect, which is Spinoza's teaching?

A third deduction from this theory is, The universe of the One is perfect, and without moral defect. But now, our human world is full of the things and experiences we call imperfections and evils, pains, disappointments, defects, sorrows, and sins. Are these judgments true or are they false? Are imperfections, faults, sufferings, sin, etc., facts in the real world, or are they our false beliefs about that world? But again, how can our judgments be false, if our judging minds are modi of the Being whom Spinoza declares is Absolute Intellect? Thus it would seem the imperfection, error, and evil present insoluble problems to the monistic thinker of this type. For if imperfection and evil are facts in the real world, then how can that real world be perfect and unchangeable as Spinoza teaches? And if imperfection and evil are not facts in the real world, how explain the error in our human judgments? Again, must we not greatly change our religious conception and the significance of religion for our lives were we to accept the monism of Spinoza? We shall not seek this God of Spinoza for comfort in our sorrows; for our sorrows do not exist for him. We shall not pray for help in time of weakness, perplexity, or peril, for nothing can be changed in the world that is already finished and perfect. We shall raise no hymns of praise for loving kindness and tender mercies; for the God of Spinoza does not so think of us. Love, compassion, sympathy are not elements in his nature, they are not experiences in his life. In none of these ways are we related to God in religious experience. Not in these experiences does the

follower of Spinoza find the reality and the power of religion.

Religion, as Spinoza conceives it, is just the knowledge of the truth that the world-whole of which we are a part is perfect reason and free from imperfection and evil. And secondly, the liberty and blessedness which the knowledge of this truth brings; freedom from error, emancipation from the bondage of finiteness of view and action, blessedness is the vision of God, *armor intellectus dei*.

There is, furthermore, a practical consequence which is serious for the thinker who accepts Spinoza's monistic solution of the world problem. If moral evil does not exist for God, why should *we* take it seriously; why regret wrong doing, why repent and strive for amendment, why strive to overcome evil in others, and lead them to repentance and moral reformation? Is not *this* our salvation from sin, to attain to the knowledge that it does not exist in God's world? It is but the incident of our finite point of view. We are saved from sin by rising above our finiteness of vision; we overcome evil by overcoming the error in thinking that evil really exists. We should not repent of wrong doing, but of the ignorance in which we believed that there is such a fact as wrong doing. We amend not our bad wills, our sinful dispositions; we correct rather our erring thought.

The monism of Spinoza unquestionably involves a profound alteration in the conception of religion which believers for the most part hold; but, that this effect upon our religious conception of the world is an altogether undesirable one can hardly be maintained. But further discussion of this point will appropriately come in the third division of our study.

We now turn to the other type of monism, the monism of

Royce. In comparison with the doctrine of Spinoza, perhaps the most important difference which the monism of Royce presents, is the attempt which he makes to put in the place of the indeterminate Being of Spinoza, a definitely conceived spiritual Being, nay a Person; and also to give to the many a better sort of existence than the merely modi character which they have in Spinoza's doctrine.

In this type of monism, the One is conceived in terms of a spiritual life. It is no neutral or vaguely defined Substance, but a self-conscious Being, a Personality, nay more, this Being who is called God, is declared to be the only complete, Individual. He is an omniscient being, the All-thinker, All-knower, a Being possessing all logically possible knowledge, insight, and wisdom. Nor is this being to be thought as transcending thought, feeling, and will, as they are in us; he has these same attributes but in absolute perfection. It is we who in our finite, particular natures think imperfectly, and therefore err in thinking, feel inadequately or improperly, and will incompletely and miss the goal. The Absolute is the Complete, the unerring thinker; his feeling is in perfect accord with his insight, and he wills and always attains the goal of his willing.

So much for the One, the Absolute Individual.

But what of the many? What sort of existence, what degree of reality falls to the finite individual being in this monistic world view? Here is the critical point with all monistic systems. We saw it was the crux of Spinoza's monism. Does the more spiritual, and the more thoroughly elaborated monism of Royce successfully meet this crucial problem of the many and their relation to the One?

Let us see in the first place, just how the many are related

to the One. In one series of passages this relation is set forth as one of substantial identity. Of our human selves we read, "We are the divine as it expresses itself here and now." No item of what we are is other than an occurrence within the whole of the divine existence. Our experience is a part of the life through which God wins his own. This is true of any experience, for instance sorrow. "I sorrow, but the sorrow is not only mine, this same sorrow just as it is for me is God's sorrow." But how about the experience of error in thought and going wrong in action? Must we not say of error and sin, what is said of sorrow, and include these experiences also in the Absolute life? So it would seem; for Royce says, "The act which the individual wills, is at the same time, what God wills. When I consciously and uniquely will, it is I, who just here am God's will." To the finite it is said, "You are at once an expression of the divine will and by that very fact an expression, here and now in your life, of your own will."

The essential identity of the many finite individuals with the One could hardly be more explicitly asserted. Spinoza could set forth his doctrine in the same language.

But, in another series of passages we find the relation between the One and the many is one of significant difference. In this part of his doctrine, Professor Royce seeks to preserve to the finite beings, especially to our human selves, true being, uniqueness and freedom. God's thoughts are not our thoughts; there is something in our thoughts which is all our own. The One thinks, has ideas; but his ideas are richer than our fragments of thought. The thoughts of God have no limit to their fulfillment, their realization, their truth.

The experience of the Absolute has in it what our experience lacks; what did it have, would answer our questions, solve our doubts. Let for instance, our experience be one of pain; in the Absolute this experience is not one of pain merely, but of pain passing into peace. Let our experience be one of struggle issuing in defeat; his experience is that of winning triumph through partial defeat. In such passages as the following, individuality, freedom, activity are clearly asserted of the many notwithstanding the fact that they are contained within the One. "This oneness of the Absolute Consciousness is nothing that merely absorbs you in such wise that you vanish from among the facts of the world." "You remain from the Absolute point of view precisely what you now know yourself to be." "You are *in* God but you are not lost in God." "You are for the divine all that you know yourself to be at this instant." Thus is it maintained that the many, through the One which contains them, preserve their individuality, uniqueness, their self activity and freedom. They are finite but not as merely finite are they in the One, they are there in such wise that their finiteness is completed in God. They may suffer pain and sorrow, but these experiences are not as such, the experiences of the Absolute; his experience is rather that of peace though pain, comfort though sorrow. The finite err in thought, and sin in action; but their errors, their sins are not identical with the Absolute experience, this is the experience of error rectified by truth, sin overcome, rejected and by that rejection made a moment in perfect goodness. But, after all that the Roycean monism has done to save the many from the fate which falls to them in Spinoza's thorough going monism, does this attempt succeed? I do

not wish to prejudge the matter or to forestall the student's own careful reading of all that Professor Royce has so brilliantly and so suggestively written; but I think it is left a fairly open question, whether or not this doctrine leaves to the many any more than a modal existence; and consequently in this respect his doctrine is in fundamental accord with the doctrine of Spinoza. It is not enough to be able to say of the many, that they are not confounded with one another; each is unique, individual; or that they "do not slip as the dew drops into a sort of shining sea." The distinctiveness of each finite being from other like beings, their distinctiveness within the One All-Containing Being does not secure to them more than what is true of Spinoza's finite individuals. These individual minds, our human selves, may be after all in their essence, only determinations, individualizations of the One only Actual Individual. Our human selves may not be "lost in God," but they can be nevertheless only "thoughts within his thought," "wills within his will," partial embodiments, and expressions of the one purpose, the one meaning, the one nature."

This truly great doctrine of Royce will meet us again when we take up the final problem of philosophy and we may then be able to answer the question we must for the present leave open.

II. PLURALISM

The essential features of the pluralistic world view to which we now come, can best be brought out by a statement of the chief points of difference between it and the monistic conception of the world. These differences are the following: (1) Monism maintains that ultimate being

is numerically one; Pluralism asserts that it is many, or rather, that there is a plurality of ultimately real beings. (2) Monism teaches that the many individual beings which constitute our experience-world are in their natures, states or individuations of the nature of the One Being which is their source and their explanation. Pluralism asserts that these many beings are each ultimate underived and, unconditioned by any other being. (3) The real world of the monist possesses complete unity, perfect order, and unbroken harmony; the absence of unity, the seeming unrelatedness and disharmony in our world of experience is either an illusion, an erroneous judgment of our finite minds, or if real, these are the forms or the stages in which the Absolute Being realizes its own nature, and wins its own perfectness. The pluralist, on the contrary, maintains that partial unity, disunity, partial order and the absence of order, harmony and disharmony are *facts in the real world.* Complete unity, order, and harmony are an ideal, not an already achieved state of the world. The pluralist says, It is because the many beings are finite and imperfect that the world as we know it, is a world of mingled unity and disunity, of order and chaos, coherency and incoherency. Such unity, coherence, and harmony as obtain in our world, are the creation of the many, acting toward a better, more satisfying state of themselves. (4) The real world of the monist is perfect and good; what we judge to be imperfection and evil do not exist in it, or if in any degree they belong to it, it is only as passing moments in the experience of the One Being. In the universe of the pluralist imperfection and evil are what they appear to be. In his world there are imperfect beings who are destined, it may be to remain so,

and bad beings who oppose the good, and they may always remain evil. A world without imperfection and evil is a dream, an ideal toward which the good are struggling, and with the hope of ever nearer approximation. (5) The monistic world view is deterministic. In a world with an Absolute, nothing could be other than it is. The individual can only express the nature of the One; and, will as he may, he can only do the will of the Absolute.

In the pluralist's universe, there are genuine alternatives and open possibilities, things which need not be actual, things which need not to have been.

Having set forth the chief differences between the monistic and the pluralistic world view, I will now discuss their relative advantages and disadvantages as rational conceptions of the world.

And in the first place, monism undeniably has the advantage of simplicity and unity. It rescues the world of experience from its seeming chaotic, discrepant, and multiverse character. It unifies it securely and completely, and thereby satisfies a deep need of our rational nature. Pluralism, on the other hand, stops far short of this goal of an intellectually satisfying world explanation. It seems to leave us with a multiverse in which our intelligence is baffled and put to confusion. Pluralism is not merely a confession of the failure of our minds to gain a point of view from which our world if rightly seen, is a unity, a system; but this doctrine logically carries the denial that there *is* such a point of view, and such a comprehensive knowledge. The monistic thinker confesses that his finite thought does not comprehend the scheme of things, or see its unity, its wisdom, its goodness; but he comforts himself with the

assurance that there is One, who, knowing all, knows they are a one world; and he cherishes the hope that our finite minds will come even nearer the goal of the perfect knowledge. For the pluralist there can be no such comforting hope. A world that is *not* one cannot be known as such. And our knowledge is destined to remain a fragment. A world unity without a One Being in whom that unity is grounded and actualized is only an ever flying goal that tantalizes our aspiring minds.

The second advantage that is claimed for monism is, that it offers a guaranteed future of the world; while pluralism can give us only an uncertain future. Only if our world is grounded in a One Mind, a One Law, and moves to One Event, can we have rational assurance that out of our present multiversity of incoherent, discordant, and blindly struggling elements, there will come that final order, unity and harmony which our reason craves. Pluralism affords no such assurance. That the now warring many will finally become one is at best a hope, a goal toward which the best are striving; but with no guarantee of ultimate achievement. For multiversity is possibly the last state of the world; and disconnections and discord may prove as permanent as coherence, unity, and concord.

A third advantage which the monist claims for his theory, is the satisfaction it gives to the ethical demand that the world prove itself completely good. If the One is good, then good must be the final goal of ill; the moral struggle must end in the eternal triumph of the good. We can therefore fight the good fight of faith in the certainty of ultimate victory.

Monism in this way offers the only satisfying solution of

the greatest enigma of our human life, the existence of evil. On the contrary, pluralism leaves us with the issue in doubt; in the battle between the forces of good and the forces of evil. Pluralism cannot silence the morally paralysing doubt, that after all the good fight may have been fought in vain; for if evil belongs to reality as essentially as goodness, what can assure us that it will not always belong to it? Nay, that it will not prove to be the stronger, and win the day at last? Is not the very heart of the moral hero taken out of him, if he must reckon with this possibility? We can endure moral evil in the universe if we can rationally believe it is destined to serve the purpose of goodness, and leave us with a better world for its temporary existence; but to make an eternal dualism of moral principles, the final act in the world's drama, with the fate of goodness uncertain, *that* is to leave unsatisfied the most imperative demand of our nature. Pluralism does this; and it labors therefore, under a most serious disadvantage, in that it robs us of the strongest stimulus to our moral endeavors.

These are the advantages which are urged in support of the monistic world view.

We will now see what answer the pluralist makes to these claims.

1. To the monist's statement that his world view alone satisfies the rational demand for unity and complete intelligibility in our world, the pluralist replies, The monist saves the unity of the world at the cost of the real being of the many. It diminishes, if it does not wholly destroy the concrete reality of the many in the interest of abstract Oneness. For the only way in which the monist can make the many one, is to reduce them to modes or states of his One—

all and only Truly Real Being. Nay, more than this, monism empties the very conception of unity of its true meaning; unity properly implies an actual variety of real differences in the many; and if this variety and difference are to be anything more than empty names, the real existence of the many must be presupposed. It is only true interaction between the many real beings which can establish unity as a concrete thing. Unless this unity is the achievement of the many themselves, the product of their harmonious and unified actions, it is an empty abstraction. Now, in the monist's scheme, the many achieve no unity, they in fact do nothing. The unitary nature of the One Being is the source, the goal of whatever processes there are by which the unity of the world is maintained. What appears to be the activity of the many and the unity achieved by them, is only the phenomenal expression of the ever unified being of the One.

2. To the claim that monism gives a sure outcome of the world's history, the pluralist replies: Unless we already know what is the character and what the purpose of the One are, we are not certain of any outcome whatever. Suppose, on the basis of a monistic belief, we could expect final unity and harmony, the banishment of all disunity and discord—might not that prove to be a unity in which the whole rich content of individual experiences, the conscious self hood, the interests of personal lives, should pass away, be absorbed and transmuted into some such unity as the Absolute of Bradley possesses, or the One Substance of Spinoza enjoys. Would anyone think such a unity desirable?

3. To the claim of monism to secure to us a truly moral universe, the pluralist concedes that his doctrine does leave

the future in an ethical aspect, undetermined. There is no absolute assurance given in advance, that the good will be completely triumphant, that some evil will not be eternal, that dualism of moral principles will not be the last, as it was the first act in the moral drama of the universe. He will contend, however, that his theory has at least this merit, it makes the struggle between good and evil a real fight, not a sham battle. But in the monist's scheme, the forces which seem to be arrayed against each other are not real enemies, a real battle is not on at all. For, is not the real world already perfect? Is not the battle already fought? the victory already won? And consequently what seems to us in this realm of our finite human lives, the struggle between good and evil is a mere appearance, the illusion of our finite vision. But, waiving this, the pluralist may further say that if in some way we can think of our world as already complete, and yet still in the making, and that there can be absolute certainty of the ultimate triumph of the good. With such a guaranteed future, how serious, how earnest would be the fight with evil, when we know in advance that victory will come to the side of the good? What would become of courage, of loyalty, of self-sacrifice, if victory of the good is a foregone conclusion? It is not necessary to our best moral endeavors, that we should now be certain that good is to be the final goal of ill; it is quite enough that we have good hope, the world can be made better; that each of the many can really contribute to the world's progress toward perfect goodness. And this leads to a strong point in support of the pluralist's doctrine, namely the moral responsibility which falls to each individual for the well being of all and the good outcome we desire for our world. No such responsibility can rest upon

the individuals in the monist's world scheme; for the One, the Absolute, does not need his help. He is sufficient unto himself. It is a vain exhortation to bid the many to "come up to the help of the Lord against the mighty." This Lord does not need helping. Rather let the counsel be, "stand still and see the salvation of the Lord." But in the world of the pluralist, the individual can truly say, "Since the world is what the many make it, I can really do something to make the world other than it is, and therefore it is true that the Lord has need of me, in order to win the day." The final victory of God will not come until every individual fighter for the good has fought the good fight himself."

Finally, the pluralist maintains against the monist, that pluralism alone makes a genuine ethical and religious experience possible; that monism on the contrary, involves the gravest consequences for the moral and religious life. The pluralist reasons after this manner, If monism is true, what becomes of our moral judgments, the judgments of regret, of responsibility, and punishment; what significance or relevancy remain to religious faith, humility, trust, prayer, which is the vital breath of religion? If prayer is a real transaction, it is a dialogue, and he who prays, must be able to say *I* and *thou*. This duality of existence, this degree of separateness in Beings, is the very foundation stone of religion. Unless our wills are really ours, we cannot "make them thine." Unless there is a true otherness in the relation of God to man, the religious attitude is impossible. Now, continues the pluralist, monism if made self consistent destroys the foundation of both morality and religion. Take, for instance, moral evil. The wrong doer if monism is accepted, is, in his essential

nature, a partial function of the One Individual Being. That being the case, we are faced by this alternative, either we must say the evil deed is not a fact for the One, the Standard Judgment, or, we must say this evil deed is a moment, a stage in the ethical experience of the One; something which is necessary to his becoming absolutely good. But if such be the meaning of the deed we call evil, we have taken from sin its strength, and from regret, remorse, and penitence, their entire meaning; for we cannot say of this deed it is something which ought not to be; for does it not have a place in the very life of goodness, nay is it not needed to make that life good? What therefore is an essential element or factor in the realization of perfect goodness, cannot be a thing which ought not to be. In the world of consistent monism either there is nothing of which we can say it ought not to be, and consequently it is a world of sinless perfection, or that world is not a perfectly good world; and the evil in that world is in the One, Only, All Real being. There seems to be no escape from this alternative.

Such is the moral dilemma of monism. It must be admitted that the monist confronts a serious difficulty, if he is not in the dilemma which the pluralist sets before him. How can he meet this difficulty or escape this dilemma? I will suggest that he can do so by one of two possible ways.

1. He may maintain that in the matter of the evil deed, the complete fact is not merely the bad deed, or the evil intent, but this bad deed, condemned, rejected, the evil intent thwarted, the evil will resisted, overcome, and made thus an element in the realization of the good will. The wrong doer, the sinner, is indeed in God, but he is there

to be rejected, scorned and triumphed over. Wrong doing, sin as a separable isolated fact is not an experience of the *All-One*, it is our finite, partial, fragmentary experience, and so just because our experience is finite and fragmentary. The ethical experience of the Absolute, on the other hand, is wrong-doing condemned and thereby made a part of goodness; sin, annulled, atoned, and so passing into the larger harmony of perfect goodness. Just as in the matter of pain, sorrow, struggle, these experiences have a significance for the All-One, the All-Containing-Being, but not just the significance they have for us. In God, the experience is not just pain, as it is so often with us; but pain passing into peace. In God there is not just sorrow as it is suffered by us, but sorrow issuing in comfort, through the knowledge of the meaning of the sorrow. We struggle and taste the bitterness of defeat; the Absolute has the experience not of the struggle separated from victory, but of the struggle which wins victory through seeming defeat. In like manner are we to interpret the fact of moral evil. It is a part of God's life, but not as an isolated fragment, detached from the whole, but as a part of the whole, to be judged only in its relation to the life of completed goodness.

2. If, however, the monist does not elect to defend his doctrine on this line, he must take a bolder tack, and maintain that neither ethical nor religious experience is affected by any conception we may frame of ultimate Being, provided that being is given a spiritual nature. Truth and knowledge remain truth and knowledge, and our interest in them remains the same, whether the being who knows and possesses truth, is One or Many. Just so moral and religious experience have the same significance and value, whether the

subjects or centers of this experience are metaphysically thought as One or Many. Good and evil, moral ideals and the struggle to attain them, beauty and the joy it gives, reverence and the exaltation it gives, trust and calmness, hope and its fruition; in a word, all that fills this life of ours with its most significant and priceless moments, is no more destroyed and rendered meaningless by a monistic conception of ultimate reality than by the conception of pluralism. Suffering is not less real when we view it as an experience of God, nay it is no longer a mere brute fact, opaque, and without meaning when it is seen to be an indispensable element in the Absolute's perfect peace. Nor is sin less real when it means the bad will which God rejects and conquers, and by so doing maintains his goodness, nay becomes good? The interest of morality and religion are not involved in this issue between monism and pluralism.

We have set forth the two opposed world views with their relative advantages and disadvantages. What shall be our critical judgment upon them? I will offer the following.

1. If the test of rationality in a belief be its adequacy in satisfying both theoretic needs and practical demands, neither monism nor pluralism satisfies the ideal of rationality. Monism, indeed, saves the unity of the world but it does so at too great a cost. Its One All Real Being swallows up the many beings; it sacrifices to its ideal of unity, the variety, the fulness, and the wealth of concrete experience. Pluralism, on the other hand, while it saves the concrete reality of the many, does so at the cost of the unity of the world. Without a unifying principle which is other than the unification of the many, there is no rational assurance that the many will ever make a universe.

2. Monism, by the questionable reality it gives to our human selves, leaves it an open question whether our moral life with its seeming warfare of good against evil is after all what it seems to be. The One is so completely All in All, that the many only reflect and serve as manifestation points for the activity, the sole agency of the One. The many do not act for themselves and of themselves; they have not power of their own to will the good or the evil. Monism truly offers us a guaranteed future, the absolute supremacy of the good, its final victory; but it tends to do so by taking away that possibility of a different outcome, without which the moral struggle is robbed of its significance and interest To give us certainty of the final result is to take away faith and the heart is taken out of our own moral welfare when it is no longer that good fight of faith. But, on the other hand, pluralism fails to satisfy our ethical demand, because it leaves the future too insecure. It leaves the bad possibilities too much in the final view. It fails to justify our hope of the final victory of the good.

III. MONISTIC PLURALISM—PLURALISTIC MONISM

Monism and pluralism have been discussed as alternative solutions of the problem of Being; but the question arises, Do these two doctrines exhaust the possible alternatives? In popular thinking, neither of these world views is held; especially is this true of religious believers. These for the most part believe in the One as the supreme, indeed Absolute Being; but they believe no less firmly in the substance-being of the many; the formula expressing their metaphysical belief, is the One *and* the Many, each equally real. There are philosophical thinkers, some of them of very high

repute, who have attempted to maintain a world view which is intermediate between monism and pluralism, a *via media* between what these thinkers regard as two extreme and equally untenable doctrines. We may call this intermediate type of doctrine monistic-pluralism or pluralistic-monism, according as the emphasis falls upon the One or upon the many. As a representative of this world view, I will present the Monodology of Leibniz, a man who deserves to rank among the world's greatest thinkers.

I will briefly set forth the main points in Leibniz's doctrine of the One and the many; and his doctrine of the Many—the pluralistic side of his world view. The foundation of our experience world, the world of our sense perception and the world of empirical science, are beings which are not presented in sense experience, nor are they identical with the fundamental concepts which science employs; they are metaphysical beings. The monads are infinite in number, and psychical not material in nature. Each elementary being is a unity—not a mere unit; for diversity, difference, and manifoldness belong to each of these beings; each is a many in one, a one in many. Each of these beings is a substance; for a substance is that which acts, is acted upon and through its actions stands in relation to other beings. Each elementary being acts from itself, or rather develops its own activities and states; each being is individual, is unique and has a life and a significance which are its own. The many beings act upon each other only in the sense, that whatever activities and changes occur in any one of these beings, are occasions or reasons for corresponding states or activities in other individual beings. There is no passing influence from one of these beings to another. In respect to their actions, the

relation between them is one of correspondence. Because of this peculiarity of the structure, mode of existence and interrelations of these beings, each is called a monad; and the systematic whole they constitute, can be called the monad world. Now, Leibniz teaches that in this monad world, there is perfect harmony between the monad beings; they constitute a universe not a multiverse. While the monad does not exert an influence upon its fellow monads, each monad adjusts its own actions and conditions to the actions and states of all the other monads in such wise that unity, order, and harmony are maintained in the monad world. It is as if each monad took account of all the other monads, knew what sort of action the interests of the whole system called for, and intelligently acted for that end. Thus do the many in Leibniz's scheme constitute a systematic whole, a universe; while remaining a many they are a unified many. This unity would then seem to be a status of the many, a result achieved by them. The One need not therefore be an existing being, as monism requires; but an ideal unity in the actions, the aims of the many real beings, as pluralism conceives it. Could we stop here we should have a pluralistic world view only. It would only be necessary to postulate for the monad beings, absolute originality; make them absolutely first in the world building, and add this further postulate, that each one can act for the whole and purposed the unity and harmony of the world, and this doctrine would obviously be pluralism. But Leibniz's doctrine is only in part pluralistic; to set up the two postulates I have suggested, in Leibniz's view would be a begging of the whole question; it would cut the knot of the world problem, not untie it. Whence came such beings as these monads? How is the

individual monad able to act, both as an individual and at the same time so as to transcend its mere individual existence, nay to act as if it were the One which contains the many? These two problems, that of the source and basis of the monad world, and that of the preestablished harmony between the monads lead to the other part of Leibniz's doctrine, the monistic side of his world view.

Leibniz clearly teaches that the monads owe their existence to God whom he conceives as a Unitary Being, distinguishable in his essence and his mode of existence from monad beings, which are in some rather ineffable way derived from this original Being. He also teaches that the monads not only owe their existence to the creative act of God as the supreme monad, but also that they continue to depend upon that same power for their existence and their powers of action; indeed, so complete is the dependence upon God, that Leibniz, in one passage, says of these monads, they are born of his essence from moment to moment; and he characterizes them as fulgurations, or rayings forth of God's nature. It is true that Leibniz distinctly affirms that continued and intimate dependence of the monads does not deprive them of substance being and of self-originating activities; and he emphatically denies that his system is close akin to the system of Spinoza, which he characterizes as the production of a "subtle but profane philosopher." But cannot the follower of Spinoza legitimately ask: Wherein, after all, is there a material difference between the two world views? So far as his relation to the monads is concerned, in what particular is there a significant difference between the God of Leibniz and the substance of Spinoza? If as Leibniz teaches, the monads derive their nature,

their powers of action, their possibility of becoming what they become, if this is altogether derived from God, pray what important difference is there between the monads and the *modi* of Spinoza? And furthermore, if these monads must constantly be preserved in being, and in whatever they do are constantly deriving their power to act from God, pray, what have these monads, either of capacity or activity that is really their own? Are they not in their essential nature just what they were made to be? And do they not act in accordance with their nature? How then do they differ from the individual beings in Spinoza's monism? Again, is not the doctrine of Leibniz as deterministic as that of Spinoza? Can the monad-beings act otherwise than they *do* act, *be* other than they are? Each monad acts from its own nature; but its nature is not original, but derived from the one only fountain Source of Being. Do not then, the natures, the actions, the characters of these individual beings go back to the nature, the power of the One Underived Being? If this is admitted, must it not be said of Leibniz's monads, that each is in reality but an expression of the Being he calls God? Each monad expresses the nature, the meaning of the Absolute Being, in a particular and finite manner, or in a finite mode of being? If this question must be answered in the affirmative, how can the follower of Leibniz meet the challenge to show in what particular these monad beings differ from the individual beings which Spinoza calls the modi of the one substance, God?

Such are the difficulties in the way of Leibniz's attempt to hold a middle course between monism and pluralism. Are not such difficulties inevitable, if a thinker undertakes

to conceive a world which shall have in it both an Absolute Being as the One, and other beings which shall be real in any other manner than as states or functions of the Only Substance—Being? I do not say that it is impossible to solve the problem of the One and the many in any other terms than either monism or pluralism; but up to the present time no such solution has been given. I do not think we can accept Leibniz's solution of the problem; and in my opinion it is the best philosophical undertaking of this kind which has yet been attempted.

Our conclusion of this matter must therefore be that, while we are not able to say the problem of the One and the many is insoluble, we can say it is not yet solved. If we are dissatisfied with both the monistic and the pluralistic world views we can disprove neither, and if we believe either one, we must confess our philosophy cannot prove what faith holds true, or if we believe as does Leibniz, we must, I think, admit it is not for the reasons by which Leibniz sought to establish the truth of what he believed. Our philosophizing does not create our beliefs; and there are beliefs which we find it necessary and rational to hold, but which philosophy has not as yet, and may never verify. The monist doubtless finds it reasonable, yes, finds it necessary to believe in the One All and Only Real Being; but he has not yet been able to prove that he is right in his belief. So with the pluralist, who intensely believes in his many as the only real existing beings, and finds it both satisfying and rational to cherish this belief. Against the monist he cannot clearly establish the truth of his conception of the world; and likewise the believer in the reality of the One *and* the many; he too, may hold fast what he thinks true in both

monism and pluralism, but he must at the same time confess he cannot see how the part truths are one; he will find it necessary and rational to hold that God is truly all in all, and not less firmly to hold that we are truly selves, with wills of our own and power on the world; he sees no contradiction in saying, "Our wills are ours, we know not how, our wills are ours to make them thine."

CHAPTER V

THE SOUL AND ITS CONNECTION WITH THE BODY

Respecting the soul three questions confront us, (1) What is the original and fundamental function of the soul? (2) What is the nature of the soul? (3) How are we to conceive of the relation between mind and body? The first of these questions is psychological, the other two are metaphysical.

We assume that soul, mind, self, ego are terms which designate the same reality. And taking these questions in their order, we meet at the outset two opposed psychological doctrines, The doctrine of voluntarism, which asserts that the original and primary fundamental function of the soul is will. The other doctrine opposed to this asserts that not will, but intellect has the primacy, both in genesis and in importance. This conception we will call the intellectualistic doctrine of the soul. Of these conceptions the intellectualistic is the older and has for the most part been the prevalent doctrine. The voluntaristic view, however, has been gaining ground in more recent years. It came in as the consequence of the extension of the theory of evolution to the mental life of man; and the consequent adoption of the biological point of view in the interpretation of mind. The voluntarist maintains that in the order of genesis, will is prior to intellect, action, impulse, feeling-prompted reactions to environmental conditions precede intelligent

behavior; intellect comes in later, is subordinate to the will; it is the will's instrument, it functions for ends which will sets. The primacy belongs to the active nature of man; feeling and action are supreme. Intellect is the instrument by means of which the satisfaction of wants, the attainments of ends, the fulfillment of purpose are accomplished. Intellect therefore is subordinate, and works in the service of the feeling and volitional nature.

Against this view, the intellectualist contends, that the original activity of the soul is cognitive. Feeling and will are reactions, and presuppose a something cognized, however vaguely. Only as feeling becomes defined in its object, only as will activity is intellectualized, is intelligently directed, is it effective for life ends. The conception of ends, the formation of purposes, the setting of goals of action are intellectual functions.

Nor is it true that there are no independent values attaching to intellect itself; that there are not theoretic as well as practical interests. Truth and knowledge are values not less than pleasure. Feelings and will do not constitute all values; theoretic activity has a value of its own; and it is not altogether subordinate or instrumental in relation to will. We shall come to this matter again in the discussion of theories of knowledge; and we will therefore pass on to the metaphysical problem of the soul.

And here we meet two doctrines concerning the nature of the soul: (1) The substantialist's doctrine, which conceives the soul as a substance being, which is distinct from the various acts and states such as perception, thinking, feeling, willing, etc.; (2) The phenomenon-conception, which makes the essence of the soul consist in the sum total of

psychical acts and states, bound together into a unity which is relatively persistent and stable.

The substance doctrine of the soul is the traditional belief, and is the popular view. The plain man thinks of his soul, mind, or ego or self, as something which is quite distinct from his various temporary and ever changing mental states and activities. His mind is as good a substance as the material objects about him or his own body; and he no more identifies the essence or real being of his soul with its changing states, than he identifies the real being of a material body with the various qualities it possesses or actions of which it is capable. This view of the soul has back of it a long philosophic tradition; its upholders can number not a few very reputable thinkers. I will now develop the philosophic argument for this conception.

1. *The Argument from Consciousness.*—The substantialist appeals to immediate experience, to the testimony of consciousness. Self consciousness is awareness of our own existence as a being. Immediate experience gives the self or ego as a datum; we experience our self or ego as doing and suffering, as acting and being affected by action upon it. The substance being of the ego is a datum of immediate experience; it is the implication of self consciousness.

2. *The Argument from Cognitive Experience.*—In cognitive experience, there is a necessary recognition of activity; knowing is an activity; a subject knowing, and an object known are two inseparable terms in the cognitive relation. Only a being can be a knower, can cognitively act; only a being can perceive, think, reason, etc. This distinction of subject and object in knowing is constituted by an act of a distinguishing subject. The object is object only as it is

made so, as it is objectified, set out for operation and determined by an active being. Thinking and judging imply the action of some being upon matter of experience, presented to this being. To judge is to assert, to assert is an altogether active affair; it is an attitude taken toward a presented or suggested subject matter of some sort. Assertion is not less an action than is willing—indeed, it may be called a form of willing; it is the choice or decision that something presented be real. Again, knowing involves a unifying, a synthesizing activity; this synthetic activity involved in knowing is no formal unity; it implicates an active being, the form of whose action is synthetic and unifying.

Our knowing therefore viewed in any particular aspect, has for its necessary presupposition an active being; for knowledge is constructive; in knowing we make or remake the real world; a knower is in some degree a maker, a transformer of the world he knows. Only a being distinguishable from his action in knowing as well as from the reality he knows, can be a knower.

3. *The Argument from Active Experience.*—Willing, voluntary action, purposing, deliberating, deciding—these are facts which only the supposition of a truly existing being can explain. Add to these the facts of ethical experience; conduct judged as good or bad, approbation, disapprobation, regret, remorse, and we have a group of facts and forms of experience, for any adequate understanding of which we must postulate a being, who sets before him ends to be realized by his action. Who values as well as knows; who seeks good and avoids evil; who judges his actions, their motives, his character and disposition; and feels complacency

or disapprobation according to the judgment he passes upon himself. This moral agent must be an individual, an originating center of actions, the home of unique interests, and unshared experiences. Only a substance being can thus be individual, original, and unique. Such a being is the only explanation of ethical experience.

There is another kind of experience which demands the same recognition of the human self as substance being—religion. The religious relation involves a duality, and a duality of beings of the same order; the other, the greater, the more powerful and better than we, we must conceive as being, never as a phenomenon or mode. And we who fear, who reverence, who trust, who cling in faith to this greater being, must conceive ourselves as beings also. The entire transaction of religious experience is meaningless on any other view of our human selves.

So runs the argument for the substance being of the soul. What reply can the upholder of the phenomenon conception of the soul make to this reasoning? He will in the first place ask that his doctrine be understood. He does not deny the reality of soul life, nor any of the facts of experience. As little does the phenomenalist call in question the alleged facts of moral and religious experience. The issue between him and the substantialist centers on the *kind* of real being which must belong to the human soul or ego. The position of the phenomenalist is, that our immediate experience gives no knowledge of such a being, as the substantialist maintains; nor is it necessary to *suppose* such a being in order to explain the facts of our human experience. The phenomenalist directly challenges the first argument for the substance being of the soul. Our immediate experience, he contends,

does *not* contain this soul being as a datum. The testimony of consciousness only means that we are conscious of having a belief in a self or soul as a really existing being and which is distinct from the various acts and states that are the content of our direct experience. Consciousness does not testify to anything; it is simply awareness of the various acts and states themselves, not of a being which is the subject, the cause of these experiences. Thus does the first argument of the substantialist break down; it is based upon an inadmissible psychology.

Nor, continues the phenomenalist, does the analysis of cognitive experience yield a soul substance as the necessary implication of knowledge or thinking. Perceiving, remembering, thinking, etc., have all the meaning we can give to them in themselves; we do not add to their meaning or make their existence more intelligible by making them the activities and states of a substance of some sort which is in itself other than and distinct from these activities and states. Why there are such things as these particular mental processes is a question which could perhaps be answered by an All-Knower, since the reason for these particular experiences must be found in the world reality. We certainly are not helped by the supposition of a lot of so-called soul beings, endowed with specific faculties for performing these actions, or for having these special modes of experience. The point urged is, that the hypothesis of soul beings is not the only one we can frame, nor is it so good a supposition as the one suggested. The substantialist should be more thoroughgoing in his search for an ultimate explanation of the facts of common experience. The second argument of the substantialist, that from cognitive experience, is not there-

fore conclusive. Nor is the third argument for the substance conception of the soul better supported by evidence. Our active experiences, including the ethical and religious life, no more demand the assumption of a soul-substance than do the other parts of our experience. Will actions do not require the supposition of a willing being as distinct from these forms of activity, any more than do our cognitive activities. Nor are our moral experiences made more intelligible by this theory of a substance-being. That which has ethical significance, on which the value judgment good or bad passes, are actions and their motives, the intentions and purposes from which they proceed. These are all that is necessary to constitute ethical experience; our ethical judgments do not go back of these actions themselves. The case is the same with our religious experience, the significance, the worth of religion remains the same, whether we suppose that over and above these individual modes of experience, there are so many substance beings to which these experiences are attached. Humility, trust, joyous confidence and hope which come from a consciousness of sharing a vaster, more enduring and friendly life—these which are the content of religion are not affected by any conception we may have of the source or the reason of these experiences.

It is in this way that the phenomenalist attempts to show that a soul-substance is neither necessary nor serviceable in explaining our mental life. There are, he maintains, some features of mind which it is not easy to harmonize with the substance conception of the soul. One is the continuity and identity of personal consciousness. Our mental existence is an ever changing thing, a stream of

consciousness; but despite incessant change there is continuity and personal identity. If we make this continuity and personal identity functional there is no difficulty in harmonizing them with the flux character of our mental existence; but if we hold to the substance being of the soul, how are we to harmonize this flux character of our mental life with this soul substance? Does this substance soul remain the same, and so preserve a static identity throughout this entire existence? If so, whence the changing states? Does it enter into change itself, or in its own very essence, change? If so, what is it more than activity, or a phenomenon? To harmonize the substance being of the mind with the fact of changing mental states is the dilemma before the substantialist.

Another fact gives rather serious difficulty to this theory of mind. It is those cases of secondary or multiplex personality, with which abnormal psychology has made us familiar. There are individuals who present in succession, sometimes in alternation, mental lives so unlike to each other in every feature characteristic of personality, that it must be said that two and even more distinct personal lives go on in the same individual. Thinking, feeling, willing disposition, character—in short whatever we regard as the mark of personality, are exhibited by each of these different groups of mental states. Now if we understand by a soul or mind a definite complex or group of mental states and activities, so organized as to maintain under normal conditions, a uniform and harmonious and stable existence, but liable under certain conditions to disruption, disintegration, and the formation of profoundly different complexes, we can readily understand how such alterations in personality are

possible. But with the soul conceived as a substance, how are these profound mutations, these multiplications of personality-life conceivable? What becomes of the one soul being in this plurality of psychic personalities? We seem to have here another dilemma for the substantialist. Is he not driven to the admission that the one soul-being, while preserving its essential, identical nature, manifests itself in mental acts and states which are so profoundly different, nay opposed in character, or if he does not take this horn of the dilemma, can he escape the other, namely, the admission that the soul substance changes completely its nature, which means it becomes another soul-substance? The alternative which the substantialist faces would appear to be, either one and the same soul substance and a plurality of psychic personalities which are more or less contradictory, or a plurality of soul substances more or less alternating in their existence.

We must now take up the remaining problem relating to the soul, the connection between mind and body. The way one conceives of this connection, is determined by his general conception of being. For the dualist, this connection presents the problem of two fundamentally different kinds of being, uniting somehow to form one individual existence, conjoined in one mental-bodily life. The dualist may conceive the relation between mind and body, either as one of interaction or of correspondence, or of parallelism. Popular dualism holds the interaction view; the difficulty it involves does not occur to the naive mind. Interaction was the conception of Descartes; but the difficulty it involved did not escape his followers; and they abandoned it for a parallelistic view, helped out by a singular hypothesis, that of occasionalism. Descartes does not appear to have seen

that only a miracle could unite in a form of reciprocal action his two substances, *res cogitans* and *res extensa*. His attempt to show how each *does* really act upon the other must I think, remain an inexplicable piece of philosophical thinking, on the part of a thinker whose thought is elsewhere so clear and consistent. He supposed that in a particular region of the brain, the pineal gland, the two substances came into a dynamic relation, corporeal motions at this point inducing mental processes. The continuators of Descartes' philosophy saw what seemed to them insuperable difficulties in their master's doctrine at this point; and abandoned the theory of a passing influence, and boldly had recourse to an essentially miraculous agency. Mind does not act upon the body, but on the occasion of every change or action in each, God the creator of both substances, by immediate agency produces the corresponding state or activity. And thus is the harmony between mind and body maintained. The processes and changes in each are made to run parallel, and to correspond, by means of the constant agency of God. This is the famous doctrine of occasionalism. But the dualist can lessen this element of miracle by supposing the two substances were so created, that their acts and states correspond, or run parallel without the need of any subsequent interposition. The harmony might be preestablished, like two clocks, so skillfully made as to keep time together without need of interference or correction. The conception then becomes that of simple parallelism. In the monism of Spinoza, and also in agnostic monism, the relation between mind and body is likewise one of parallelism; mind and body being modes or phenomenal manifestations of this One substance, the parallelism is

between phenomena, not between beings. For the idealist, inasmuch as the body is a phenomenon of the mind, neither interaction nor parallelism is a possible conception; and for the same reason, for the materialist, who makes mind a phenomenon of the body, neither interaction nor parallelism is admissible. The possible views of the relation of mind and body therefore, are three as follows:

1. Interaction.—The popular view and held by Descartes.

2. Parallelism.—Held by dualists and by monists of the type of Spinoza and by agnostic monists.

3. Phenomenalism.—mind made the phenomenon of the body—materialists' view; body made the phenomenon of the mind—idealists' view.

CHAPTER VI

COSMOLOGY

The problems which will occupy us in this division of our study are the following:

I. The problem of Space and Time.

II. Uniformity of Nature and Causation.

III. The Mechanical and the Teleological Methods of Explanation.

Taking the problems in their order, we proceed with

I. THE CONCEPTIONS OF SPACE AND TIME

The Conception of Space

To the plain man, to the uncritical mind, space means something objective, as much so as objects which we seem to perceive in space. The plain man says space is independent of anybody's perception of it. It is distinct from, yes, separable from objects which occupy it. Each object which we perceive occupies some definite region of this space, and takes up some portion of it, to the exclusion of other objects from the same space. But any one of these objects can change its position in space, can occupy some other portion of space and be in other respects the same object; and the space which this object occupies remains unchanged by the object's presence in, or absence from, that region of space; nay, were all objects suddenly to vanish, or

be annihilated, the space they occupied would remain the same, only it would be empty space. The most prominent feature of space is out-ness, and spread-out-ness. It is the field in which all objects of our perception exist. This field we conceive to be infinite; we can draw no final boundaries; any limit we set necessitates a step beyond, there is always an unbounded extent lying outside any enclosure of space. It is in the space field that we locate all our perceptions, those of sound and smell, and taste, not less than the unmistakably spatial perceptions of sight and touch.

In the space field, every object exists in definite space relations to other objects, to ourselves, the percipient, and to every imagined percipient; these relations are position, distance and direction. Each object in space has a definable form, and its boundary lines have a definite extent. There is a quantum as well as a form of space-occupancy in the case of every object of our perceptions. Each object in space presents three dimensions: it has simple linear extension or length; it has a surface, this surface having boundary lines which thus enclose a portion of space; each object also presents a third dimension, which is constituted by a linear extension from the percipient, or by a line that is perpendicular to its surface. Length, breadth, depth or thickness are the terms which designate these dimensions in space. We have observed that space is of illimitable extent; there is no absolute maximum of space extension; in another direction of view, space is infinite, there is no absolute minimum of space extension, space is infinitely devisible. A physical object may not be susceptible of such division, the limit of physical division or separation into parts may be reached, but we could never reach a minimal portion of space.

Another characteristic of space must be noted, that is, its absolute continuity. Divisions of space are not separations between parts of it, it does not part; between any two portions however small, be they mere points, another portion can be put, another point be placed. Space is not discontinuous, there are no gaps within it. The discrete parts, the portions of space which our attention selects and which we abstract and so separate from their context, do not represent the space of our experience, but are our artificial mode of dealing with the concrete reality, either for theoretical or for certain practical ends. The famous argument of Zeno to disprove the reality of motion was based upon the assumption that space is a discrete quantity. The argument assumes that space mathematically divided gives an infinite series whose terms are discrete quantities. The reasoning overlooks the continuity of space, the fluent character of real space. Assuming that space can be subdivided so as to form a series of the same character as a decreasing geometrical series, and consequently assuming that motion through space is a process of the same sort as the summation of an infinite decreasing series, it was easy to prove that Achilles would never overtake the tortoise. Two errors closely kin underlie this ancient sophism; one is that space itself, the space of our experience, is discretely divisible; the other error is the assumption that motion in space is a process of the same nature as the summation of a mathematical series. It is not surprising that the *locus* of the fallacy in Zeno's argument has been a puzzle to the formal logicians, that so eminent a logician as Bishop Whately could find no logical fallacy in this reasoning. The fallacy is extra-logical, it is a metaphysical error.

Time

Though less distinctly, time to the ordinary view appears to have objective reality as truly as space. We distinguish time from the things we put in time, events, changes, our ever-passing thoughts; we imagine time would go on, would flow, as a stream, did nothing come into existence or pass out of it.

We can best bring to our minds the properties of time by comparing time with space. Space, as we have seen, is out and spread out, it is a field. Time is not out or spread out, it is not a field. Time is an order, the characteristic of which is succession, one-after-another, a nach-*einander*—while space is a *bei-einander*. Hence, viewed in a quantitative aspect, time has but one dimension; if we represent a motion which follows the time order, that motion can be in but one direction, as the boat which follows the flow of the river can move in only one direction. In space, motion can be in any direction, to space it is indifferent what that direction is. Both time and space are continuous quantities (taken in their quantitative aspect), but space has static continuity, while the continuity of time is fluent; the parts of space do not move, while the parts of time are never at rest. As with space, so with time, in our conceptual treatment of it we break time up into discrete successive moments and periods, as if there were gaps between the successive portions of time. And inasmuch as we represent change and motion in time, we likewise break up what in itself is a continuous process without parts into separable stages and phases, and think of the motion of a body as the occupancy of separated portions of space in successive, but really separated intervals of time. And

change we are wont to conceive as if it consisted of separable states of a body, or process, between which there is a gap, in which change is not going on. The truth is, that motion and change are continuous processes. The appearance of the body A at different points in space, in successive moments of time, is not the fact of motion of A; that fact is the continuous passage of A through these portions of space in successive portions of time. The occupancy of different portions of space in successive moments of time is an incident to the motion of the body. So with change: The body A changes, it passes, we will suppose, into different states during a measurable time-period; at the present moment, it is A, at the next distinguishable moment it is A-a, at the next A-b-a, etc., but the different states of the body A flow into each other, just as the successive time moments. A, passing into, or becoming A-a is the fact of change; just as a "now," passing into the "not yet" is the fact of time.

A somewhat intimate relation exists between space and time whatever be their ultimate natures. Thus, a motion in space is also a process in time, a moving body has both a spatial and a temporal character. Again, we represent the interval between two selected time moments by a line; the standing symbol of time is a stream, the expressions, the flow of time, the flight of time, these terms are terms of spatial as well as temporal connotation. To some extent the things of time are things of space; but there are some facts of our experience which we place only in time, and which have no spatial character. Mental states are such facts; ideas, sensations, thought, feeling, purpose, etc., have no spatial attributes; they exist only in time. Indeed, it is a distinction between the physical and the mental, that

physical objects and processes can be both spatial and temporal, but mental processes exist only in time.

We have set forth the characters of space and time as we know them in our immediate experience and as we conceive them in abstraction from their content, *i.e.*, from the objects and events which fill them. We now come to the question, what are space and time in themselves? What sort of real-being do they possess? The metaphysical problem of space and time is intimately connected with the epistemological problem of our knowledge of space and time. Accordingly we will first attack that problem.

Concerning our knowledge of space and time there have been, since knowledge itself became a philosophical problem, two doctrines. One is the doctrine of rationalism; the other is the doctrine of empiricism. The rationalist maintains that this knowledge is original; it is due to a specific endowment, a faculty, a mode of functioning, which is independent of experience. Sense-experience, the operation of things on our minds, may be necessary to call forth this innate power of cognition, but this cognition itself is not derived from the experience in which it arises; this knowledge is mind-born, not something which results from the mind's experience; our ideas of space and time are in that sense of the term innate and a priori. The rationalist admits that some of our knowledge relating to space and time is empirical. It is from experience alone that we know what particular objects are in space, what events transpire in time; it is by experience that we learn the definite properties and relations by which objects and events are distinguished in their spatial and temporal character. But the rationalist's contention is, this experiential knowledge is

made possible by a non-empirical knowledge, this knowledge being the foundation on which rests all our developed, our special knowledge. Experience is necessary to our knowledge of that which fills space or time, but it does not give the knowledge of space and time themselves. In proof of his theory, the rationalist appeals to the character of space and time judgments, which he maintains are the foundation of the exact sciences. These judgments are absolutely universal; in this respect they differ from empirical judgments, which though capable of great generality are never universal. Space and time judgments are from their nature universal; they are seen to be so when their terms are understood; not so with empirical judgments; there is no necessity about them which carries strict universality, as is the case with space and time judgments. Space and time judgments are therefore valid for all experience. Now, this certainty of their universal validity arises from the fact that they are underived from experience and independent of it; on the contrary, a judgment which is derived from experience cannot claim validity for all possible experience; it can claim validity only for experience already had.

In opposition to this doctrine, the empiricist maintains that in respect to origin, our knowledge of space and time does not differ from our knowledge of the objects which exist in space, or the events which occur in time. Space and time have no existence or meaning apart from the objects of our perception; in their psychological character they are qualities, or features, which qualify objects, as truly as do color, sound, smell, resistance, etc.; and these spatial and temporal characters of things are experienced, as are the undeniable qualities and relations of things. Space

and time in the abstract, are no more entities, known in some transempirical way, than are hardness, color, sweetness, etc. Space and time are, therefore, experientially known; and apart from some form of experience, we possess no knowledge of them whatever. The truth appears to be the reverse of what the rationalist teaches; space and time are not a priori ideas; they are not presupposed in an experiential knowledge which only seems to yield them. On the contrary, they presuppose experience, both in their genesis and in their meaning.

Nor does the fact that space and time judgments are at the foundation of the exact sciences prove that these judgments are independent of experience, for it is the characteristic of the judgments which make up these sciences that they are hypothetical, their validity is not absolute or unconditioned, but is always subject to the condition that experience remain the same. The highly abstract character of the conceptions in these sciences enables us to rest secure in this assumption. The truth is, there are no absolutely universal or unconditionally valid judgments, which have anything to do with our world of experience; the rationalist's necessary and consequently absolutely universal judgments are not the foundation of any of the sciences, not even of the so-called exact sciences; these sciences have an empirical basis, as much as do the concrete sciences.

In confirmation of his view, the experientialist appeals to genetic psychology. Experiments and observations in the case of young children show that their space and time perceptions are coëval with certain sense experiences; the infant's space world shares the character of his world in its other features; that world in its spatial aspect is a vague

total, a "big, blooming, buzzing confusion." The process through which, from this undifferentiated reality, the child's knowledge grows defined, and passes into definite, richer knowledge, is wholly experiential; no other factors or mental functions are to be assumed in this development than perception, discrimination, association, memory, abstract thinking, etc. Nowhere is there need or justification for supposing such a transexperiential function or sort of knowledge as the rationalist assumes. Our actual knowledge of space and time being thus, from the start, interwoven with our concrete experiences, showing as it does the same characteristics of growth, development, it is not only gratuitous to suppose this knowledge is wholly unique; but such a supposition is contradicted by the facts of our mental development.

Leaving this problem of our space-time knowledge we come to the more difficult problem of the meaning or nature of space and time. What sort of reality shall we predicate of space and time?

Regarding the nature of space and time there are two doctrines. The one maintains that space and time are objective, and therefore would have meaning, would in one sense exist were our human minds to vanish. The other doctrine asserts that space and time have subjective reality only, and consequently, were our minds to vanish, space and time would be no more. I will first develop the subjectivity doctrine. It makes space and time the two forms in which our perceptive experience and inner mental states are arranged; space being the form in which the matter of our sensations are arranged, and time the form in which mental states and what we take to be changes in the external

world are arranged. Space and time are two modes of synthesis by means of which our experience is organized, in the form of objects, events, changes, cause and effect relations. Space and time are for our human knowledge of fundamental importance, being the two original syntheses or forms of arrangement in which all the data of experience must be apprehended and molded, in order to form a world of objects, or events, in short, the world of *empirical science*.

But from this meaning of space and time, serious consequences follow for our world view. One consequence is, that objects and events are phenomena, not things in themselves. If we conceive of beings that are not objects of our perception, not revealed through our time experience, we must conceive them as non-spatial, non-temporal. Time and space have no relation to them; if cognitive and possessing spiritual life these beings or this Being does not know space and time, or rather, such beings do not exist under the conditions of space and time. But this subjectivity of space and time carries with it the ideality of the entire world in space and time. External objects, their properties, motion, causal connection, etc., in being phenomena, exist only in and for our human minds. The external world viewed as to its content, does not differ from Berkeley's world; the only reality pertaining to our world which is not constituted by our minds, is what Kant called things-in-themselves, and the mere matter of sensations, supposed to be given by these things-in-themselves or thing-in-itself. Save as the source of our sensation data, things-in-themselves are outside the sphere of our knowledge. The conception of thing-in-itself is hardly more than a limitative conception; it marks the limit of our knowledge; it also re-

minds us that the limit of our knowledge is not the limit of real being—also that our mode of knowing is not the only mode of cognition. But thing-in-itself or non-spatial-non-temporal reality, is for our minds as truly a *terra incognita* as Spencer's unknowable; space and time set the bounds to the world of the knowable. When we say of any being, it is in no manner related to space or time, we thereby confess that we have no positive knowledge of this being. The limitation of our knowledge to phenomena is therefore one consequence which appears to be inevitable, if space and time are made purely subjective.

But another consequence follows from this meaning of space and time. If there are beings, if there is a Supreme Being, an *ens realissimum*, inasmuch as time and space have for them no relevancy, the world to which they belong and our human world are as good as separated by the whole diameter of being. Now, this fact carries consequences of serious moment, for those interests which are supreme, morality and religious faith.

Ethical values, the spiritual life, are bound up with the reality of space and time; apart from a time-process, activity, the struggle to realize ends, the pursuit of ideals, growth, development, in short, the historic life of man, are impossible. Ethical distinctions and values, ideals, lose their content, if we eliminate the realities of time and space. An Ultimate Being, to whom time and temporal development have no meaning, can hold no moral relation to our human life; such a being cannot be conceived as the upholder of moral ideals, the Power that makes for righteousness; for such a Power must work in time, and achieve his purposes through a time process.

Would not the conclusion seem to be, that if space and time are held to be forms of our human minds, the cosmos, save the mere data of sensation-matter, is wholly of *our* making, and morality and religion are also our human creations; we live, move, and have our being in a humanistic universe.

But it is time to turn to the other doctrine which makes space and time objective. This objective being is either (1) one of quality, or (2) relation, or (3) substance.

The quality meaning of space and time is quite in accordance with our spontaneous belief, our natural way of thinking and speaking; we speak of the length of a body, the duration of an object or an event, as we speak of the color of an object, the sharpness of a pain; extensity seems to be as truly a quality of a perceived object as its hardness; a sensation has extensity, as really as it has intensity. Psychologically interpreted, the words sound, square, large, here, there, etc., connote as truly properties of objects as hard, resisting, hot, sweet, etc. Qualities are relative, never absolute. They are relative to our experience, to some behavior of ours, some purpose in dealing with objects; qualities do not inhere in things apart from some actual or supposed experiential dealing with things; taken in this way, there appears be no reason for making a distinction between space and time, when predicated of things, and the other adjectival predicates.

There is, however, one feature of space which is thought to be incompatible with this view; it is the intimate connection which exists between space and all the qualities of perceived objects. Each quality seems to have a spatial character, as a part of its own quale, or to involve a spatial

reference: thus color is always an extent, hardness is an extensive feeling, even the secondary qualities, smell and taste, carry a reference to space; they are localized; and feeling of extension is part of their content. If space is a quality of perceived objects, it is not only universal but sustains a peculiar relation to the other qualities.

On more careful examination it must be admitted I think that space is unlike the other qualities in virtue of this peculiar relation it sustains to them; it does not merely coexist with them, but it seems to be a part of their essence as qualities or to be inseparable from them. We must, I think, go farther and say space does not appear to be a quality which coexists with other qualities, but a feature, a part of, every quality we attribute to things in our sense experience. One circumstance would seem to corroborate this view, namely, space perception is not dependent upon the excitation of special nerve-organs as is the case with the perceptions of touch, color, sound, taste, smell, etc,; this perception arises in connection with each of the other special perceptions, as we have seen; but the perception appears to depend upon a certain order or arrangement of the sense-impressions; the sense-impressions which admit most readily of this arrangement, simultaneous and successive, are those of touch, sight and motion. It is known that these sense-experiences are the most important in the genesis and development of our space knowledge. These facts regarding space perception suggest that the quality conception of space does not offer a satisfactory solution of our problem.

The view that space and time are entities, or rather substance realities, is untenable; it owes its plausibility to

a confusion into which unphilosophical thinking readily falls; the confusion of meaning and being or existence. Space and time lack the two fundamental requirements of substance-reality, activity, and the ability to enter into relations to other being through activity.

The definition of space and time which makes them relations is not more successful than the substance conception; for as soon as we try to make explicit what we mean by the relation itself, we find that we must involve space itself, either in the relation or in the terms between which the relation holds. Thus, if I say A is at the right of B, I may say that the relation between A and B is a relation of space; but obviously that does not tell me what this relation of space means, or what space is as a relation. If I say, I mean by space such a relation as there is between A and B when A is at the right of B I have simply defined space in terms of itself. It is not possible to define the relation we mean by space, so as to distinguish it from other relations, without employing either the term space or what connotes space. The attempt to find the meaning, the esse of space in a relation leads round to the starting point, we move in a circle, the attempted definition is tautologic.

The quality conception of space and time would seem to be the only tenable one, if we are to hold that space and time are objective. But may it not be that the subjective meaning after all is the only one in which we can rest? If we abstract from mind or mental experience in some form, it seems impossible to say what space and time are. Form, order, synthesis in a conscious experience, seem to be the essential of these realities. We can avoid the difficulties we encountered when we made space and time the forms

of our human experience. Why not make them the form of *every* perceptual experience, and of every experience in which there is succession, a process wherein something comes to be or undergoes change or passes away? It would not be necessary to conceive of beings which exist out of relation to space and time, and to divide the world into a space and time world and a non-spatial, non-temporal sphere of quality. An Absolute Being, did he exist, would as truly exist in space, in time, as we do; but he would not be limited in his knowledge and in his power of action to time and space conditions in the manner of our finite minds. He would know all that is temporal, know it in its temporal character; but he would comprehend all moments of time in one consciousness. In this Infinite Mind, the infinite series of time moments would be summed, would exist as completed. And so with space, it would set no limitations to the complete knowledge and the absolute power of action which this Being would possess. Thus would the consciousness of this Being be both temporal and eternal; temporal, for the passing moments, change, growth, etc., would be his experience; eternal, not because unrelated to time, but because related to *all* of time, to *every* passing moment, to all *possible* time-moments.

II. UNIFORMITY OF NATURE AND CAUSATION

We take up next the problem presented by the order, uniformity and interconnection which pervades the physical universe.

By uniformity in nature, is meant the fact that nature maintains constancy and consistency in her behavior in such wise, that under the same conditions, the same phenomena

always occur. Finding that A occurs to-day in a certain setting or context, we shall expect A to recur to-morrow and at any future time, provided these circumstances remain or recur. But this observed fact about nature is not an isolated feature; it points to a deeper lying feature, a structural principle of the world; Nature is orderly and uniform, we say, because causal connection is a universal law of the cosmos. But what is causation? What is causal connection?

Of causal connection there are two conceptions, (1) The empirical, or phenomenalistic conception, and (2) the metaphysical conception. According to the first conception, causation means simply an invariable order of succession in time, the antecedent event or phenomenon being distinguished as cause, the consequent event as the effect. Two things, A and B, are cause and effect if, whenever A occurs B occurs, and whenever A does not occur B does not occur; to establish the fact of causal connection, it is only necessary to ascertain and prove the invariable occurrence of B upon the occurrence of A, and its non-occurence in the absence of A. In this view of causation both cause and effect are observable facts; the causal connection itself is likewise a fact in the observable order; the only circumstance which distinguishes a causal connection from a mere sequence in time is the invariability of the sequence in the case of a causal connection.

The second doctrine of causation maintains that, over and above this observable time connection between two phenomena, there is a determining principle which enforces this time sequence, and is the reason why just this connection exists, and why it is an invariable one. If A

is the cause of B, it is so not merely in virtue of its being the invariable time antecedent of B. but in virtue of some deeper lying fact, some actual determination which it exercises upon B. In a truly causal connection, two things are contained; (1) invariable succession in time; this is the observable part of the process, and (2) an unobserved but necessarily presupposed fact, causal determination is a dynamic principle or agency. The observed, invariable order of events is the sign of the presence of the efficient factor in the total fact; it is the unobserved cause, which explains the observed connection between the two observable phenomena.

These two ways of conceiving causal connection satisfy two distinct interests, the interest of science, and the interest of philosophical explanation. Science has no occasion to postulate more than an invariable order of occurrence; any two or more phenomena, between which such a connection exists, are respectively cause and effect. The sole problem for science in this matter is to ascertain what phenomena stand in this time order of occurrence; science postulates this invariable order of events as an ultimate fact of the cosmos; she confesses she has no other justification of this postulate than uniform, uncontradicted experience. The postulate has worked, hitherto, with unbroken success; and the presumption of its truth is as good as a certainty.

For our practical interests and aims also, this meaning of causation is sufficient; for the successful guidance of action it is only necessary that we should know on the basis of present conditions what to expect, what to be prepared for; the nature of the bond which links the facts or parst

of our experience is not a practical question. It is only when we become reflective, and seek to penetrate deeper than the observable order of events, that we become dissatisfied with this conception of causation; the plain man as well as the philosophical thinker finds this conception unsatisfactory. In his mind there is a demand for a more intimate, a more effective connection between the thing or fact we call a cause, and that which we call its effect; both the fact and the nature of this causal connection he thinks he finds in his own experience of action; he experiences agency in the execution of movements, the carrying out of his plans, the control and direction of what he takes to be forces or agents in the world about him. Causation, as thus known in his own experience, is something dynamic, efficient, a real doing of something upon something. The plain man carries over to nature what he finds in himself, and conceives the processes there after the analogy of his own activities. There is something more in the cosmos than mere events, a succession of phenomena, moving pictures; there are dynamic transactions, active beings, forces, and energies. Bodies not only move, and change, they are *made* to move, made to change by the action upon them of other bodies or by energies which develop within themselves. In short, the actual world of concrete experience is a world of dynamic transactions, of effective activities, of productive agencies. Science can for her special, and consequently partial aims, abstract from this dynamic, forceful character of the cosmos; but in so doing she confesses that the knowledge she gives is only in part; her abstract treatment of the world must not be taken for a description of the world of our concrete experience. Now

must not the philosopher agree with the plain man, so far as he protests against the scientific meaning of causal-connection, as a wholly correct and complete account of the real world? The real processes which go on in nature, the actual connection by which the individual beings of the world are linked, are not expressed in the scientific conception of causation.

Causal connection as science conceives it is at best a fragmentary truth; it becomes a serious error if taken for more than such a part-truth. Nor is the scientific conception without difficulty of its own; and science falls into embarrassment in strictly adhering to her own meaning of causation. According to this doctrine, that which in any phenomenon or fact which makes it causal in relation to another phenomenon is its antecedence in *time;* a *time priority,* be it never so little, must distinguish the cause from the effect; this time-priority is the only distinction there is between the two. The two things which are cause and effect can be identical in every discernible element save the circumstance, that one occupies the earlier position in the time order; or the two things may be unlike in every feature; since this order of occurrence is all that constitutes the causal relation between them. But it is at this point that the difficulty is encountered. Is there a time-interval between a cause and its effect? Or, more exactly expressed, is the absolute beginning of an effect separated by a time-interval from the absolute termination of the cause? Take the case of two balls, A and B; let the ball A in its motion come in contact with the ball B at rest. The result of course is that B begins to move; this motion of A is the cause of the motion of B. Now was there a time interval

between the beginning of the effect, the motion of B, and that in A's motion? Is not the real transaction an absolute continuity of process just as time itself is an absolutely continuous process? If it be admitted that cause and effect are strictly contemporaneous, then obviously priority in time is not the distinctive mark of a *causal phenomenon*.

The only escape from this difficulty is to maintain that there is but one process in which there are two stages or phases of which one may be called the effect, and the remaining anterior part the cause. But would it be possible to interpret causal connection in this way, in those instances in which the two terms are heterogeneous? We have apparently in such cases not two phases of one process, but two processes which are quite different in character. The answer to this question is that the ideal of scientific explanation is the reduction of phenomena to their simplest elements and elementary phenomena to motions; and these are so far homogeneous as to admit of description and measurement by the same formulæ. Now wherever we succeed in finding a causal connection, it is possible to analyze the two phenomena between which this relation subsists into processes of actual or potential motion, which we can assume to be continuous; and the same fundamental character, and then the terms cause and effect, will mark the two distinguishable phases or stages in this process.

It would seem to be made out that for science, causal connection need be only an empirical fact; and the conception of cause need have no metaphysical implication whatever. Of course, the scientific thinker does not deny that there is a deeper reality than phenomenal causation; but what may be the nature of this underlying reality he main-

tains is not a problem for science; science has explained a phenomenon when she has described in general terms the manner in which that phenomenon has occurred; and the term cause, causation, is one of these descriptive terms.

But here as elsewhere, the philosophical thinker finds his problem where science is content with assumption or postulates. The philosopher so far agrees with the plain man in maintaining that the essence of causation lies back of that which science calls causation. The metaphysical thinker insists that such a fact as invariable succession in time, an invariable antecedent for a given event, in *itself* calls for explanation; the postulate that this relation of antecedence and consequence is unconditional and invariable needs justification; the mere fact that it has been observed hitherto with no exception is itself not a rational ground of assurance; uniform experience up-to-date is corroborative, only because it strengthens the belief in active and efficient nature in things not seen which determines this visible order in time, and is the only reason that there *is* such a fact as an invariable antecedent and consequent.

Our time-experience is that of an irreversible succession. Now, this fact that we cannot in experience reverse the time order is explicable only if we suppose the content of experience, the filling of time, is subject to an agency which determines this order, and makes it irreversible. Of course, the question, what is the source, what is the nature of this determining influence, carries us back to the problem of ultimate being; it is a part of the larger question, what is the ultimate being of the world? Causal connection is a special feature of the cosmos, a more comprehensive conception of the cosmos which includes this feature of it,

is that all parts, the ultimate structural elements of the cosmos, exist in reciprocal dependence; they form a systematic whole, within which each element or individual has its place and function determined by its connection with the whole; so that no change can take place in any one element, without involving a corresponding change in every one of the others. It results from this structure of the world, that the real cause of any given event is the sum total of conditions existing at the time; the universe is implicated in every one of its parts, and changes in every individual change; it is owing to the time-form of our experience that causation assumes the character of antecedent and consequent; we live in time; our practical interests, our purposes, our expectations, etc., have to do mainly with the succession of events, the flow of experience; both for our theoretic and our practical purposes we need to include in the cause of a given phenomenon only those conditions, near or remote, which have a sensible effect upon the phenomenon, and which we need to take account of, if we would predict the occurrence of this phenomenon, or be prepared for the *re*currence of a like phenomenon. This larger conception of causal connection makes it synonymous with the principle of sufficient-reason; and sufficient reason includes ends, purposes, as well as antecedent conditions, or what are called efficient causes. And this larger view makes it clear, that causal explanation, as we ordinarily conceive it, is a partial explanation; it is giving only a part of the sufficient reason for the fact that is under investigation. As we have seen, for the aims of science, and for our practical needs, this partial explanation is sufficient; but for the philosopher who seeks the whole

of the sufficient reason, the *true* cause of the simplest happening in the world, is the nature of the whole.

So much for the meaning of causation. We pass now to the question, whence our knowledge of cause and effect?

Regarding our knowledge of uniformity of nature and causal connection there are three doctrines, (1) the doctrine of rationalism, (2) The doctrine of pure empiricism, (3) the doctrine that uniformity of nature and causal connection are postulates.

The first of these doctrines holds, that we have intuitive and consequently certain knowledge that nature is uniform and all events causally connected. This knowledge is derived from reason, is a priori, and the propositions in question are self-evident; our reason discerns and affirms this rational structure of the world.

The empiricist maintains that these beliefs are wholly empirical in origin, and their validity rests wholly upon experience. Uniformity of nature and causal connection are empirical facts; they are two characteristics of the world of our experience; this routine manner in which events occur, being constant within the limits of experience up to date, we expect will hold good of experience not yet had; this belief in the universality of what experience has shown, is a simple induction, a generalization from experience. This disposition to generalize from experience to expect that the future will be like the past, is like other native propensities, an ultimate fact of our mental natures, an instance of the law of habit, which seems coextensive with all organic life.

The third doctrine agrees with rationalism in its rejection of the empiricist's position; and with empiricism, in its

denial of intuitive and a priori knowledge of causal connection. The essence of postulation is not to claim knowledge, but to ask that something be taken as true for the purpose of such experience and action as will justify this postulation. The source of these two postulates is deeper than mere habit resulting from a passive experience; that source is rather a rational nature, which is both theoretic and practical; the need to know, the need to act. The deeper root of these postulates is in our ethical nature. It is the demand that nature will not put us to intellectual confusion in our efforts to know, or frustrate our endeavor in the maintenance of life.

Against the rationalist's doctrine, stands the fact, that men who have not developed intelligence on the basis of experience do not take nature to be uniform, nor recognize a causal connection in phenomena. Only gradually, and after repeated experiments in dealing with nature, does the idea arise, that there is uniformity and causal connection in nature; these are not discovered until they are looked for. The way in which this connection is produced in the mind, clearly shows that it is no intuition or product of a priori function. The psychological-historical genesis of these beliefs disproves the rationalistic theory of their origin.

There is doubtless a considerable measure of truth in the purely empirical theory; this routine character of the cosmos, this determinate order in time of all its events, are facts of experience; our belief is validated only by experience; it would be quite destroyed by contradictory experience; it holds firm so long as experience runs without exception in this direction. But, unless the conception

of experience is broadened, so as to include certain active elements, certain selective activities and will attitudes, tentative ways of reacting to the merely given matters of experience, the empirical theory hardly explains these conceptions of nature. This way of conceiving, and actively taking the world, is the fruit of a dealing with the data of direct experience, which resuts in no inconsiderable modification of the brute factls themselves: a transformation of the world which our direct experience presents. Nature presents to simple passive experience quite as often a chaos, as anything coherent and orderly; order and connectedness are found, only as by selective attention, and in pursuit of certain ends, we *constructively* reach them. Order and causal connection are not impressed upon our minds by a passive experience of them; they are rather ways of conceiving nature which, for our human needs and purposes, we are impelled to adopt; and which we increasingly verify by experience; these beliefs are not mere results of experiences we have of nature; they are rather the fruits of our experiments with nature; and into this experimentation (which is both theoretic and practical) there enter factors of which the simple empirical theory takes no account. The disposition to look for order and connection in the world, where we do not observe it, to persist in the conviction that it exists, despite contra appearances, to extend this order and connection throughout the range of possible experience, has its root in a deeper function of our nature than empiricism assumes. It is this deficiency which the postulation-theory supplies. According to this theory, our world comes to present uniformity of behavior and causal connection largely in

consequence of the methods we are forced to adopt in handling the materials which experience yields. Three facts are especially prominent in shaping this conception of nature:

1. Social communication, which makes possible common understanding, common work, cooperation for common ends, and the satisfaction of social needs. Social communication leads us to select, to single out these features of regularity and coherence, which experience presents, to conceptualize and make them universal.

2. Our industrial arts lead to the same way of treating nature; for our success in these arts, we need stability, uniformity and connectedness in our world; we tentatively assume they are there; we work on this postulate, and gradually verify it by our experience in its working.

3. Our scientific knowledge, born in part out of practical needs, always controlled by practical interests, takes this active and constructive attitude toward the world it is seeking to explain. It postulates at the very outset that structure of the world which it is necessary the world shall possess if science is to succeed in her task. The whole work of science is thus a tentative thinking of reality, to see what will come of our endeavor. This postulatory attitude to Nature, this venture of faith, and willingness to work upon the postulate, is the spirit of science. Nature's uniformity and causal connection are two fundamental postulates on which science is willing to work; and she has worked so successfully upon them that they have assumed the character of axioms; they are not self-evident truths, intuitively known as rationalism teaches, but postulates, springing from deep rational necessities, both theoretic and practical;

and, uncontradicted by ages of experience, they have the working value of axiomatic certainties.

III. MECHANICAL AND TELEOLOGICAL CONCEPTIONS OF THE WORLD

The third special problem in cosmology is presented by the facts of unity, harmony, and various adaptations, those which exist between inorganic and living beings and, particularly, the adaptations of living beings to their environment. The central problem is that of organic nature.

In explaining the facts of organic nature two principles have been followed, two conceptions have been held, mechanism and teleology. Our problem relates to the meaning and the validity of these conceptions.

I will first define the two principles of explanation.

1. The principle of mechanic-explanation: To explain mechanically is to find the explanation of any given event or phenomenon in some antecedent condition or conditions, or in agencies which operate with the same undeviating regularity which we observe in the action of machines which our art constructs. The agencies which produce the result under investigation do so without prevision of this result, and in accordance with a principle of determination which makes just this event or phenomenon certain, and excludes the possibility of a different result in the existing conditions.

2. The principle of teleological explanation. A fact or phenomenon is teleologically explained, when it is not only seen to be a result, an effect or terminus of a process of change, but is viewed as an end, in relation to which these antecedent conditions and changes have their meaning.

In the teleological conception of an event, or being, this being or event is conceived to control and direct the agencies or series of changes which issue in this result.

These two conceptions, mechanism, teleology, will be more sharply defined, if we indicate their points of difference.

1. In the mechanical conception of an event or being the antecedent process or events are the sole explainers of the given fact. In the teleological conception, these antecedent conditions are not the sole explainers of the given fact; this fact is more than a result, it is also an end, and so something which is more than an antecedent is necessary to explain it.

2. In the mechanical explanation, the agencies which effect a given result are in no manner influenced by the result in which they terminate; this resultant is not a goal or end. It is indispensable to the teleological explanation, to interpret this resultant as at the same time a goal, an *end*, and consequently to hold that this end prior to its actualization influences whatever processes issue in it as a result. An end-seeking, if not end-directed activity, or process, is fundamental to a teleological explanation. On the contrary, so far as an explanation is mechanical, it must exclude this kind of agency.

We have now to discuss the validity of these two principles of explanation. In dealing with nature we seem to be justified in the use of both principles, notwithstanding the opposition between them.

We find in nature that processes go on with a machine-like regularity; we find that any particular phenomenon which we may single out has certain antecedent conditions on which it invariably follows; these being given, we feel

certain that this consequence and no other could follow; we are never disappointed in this expectation when we have become certain of the antecedent conditions; given these and the event in question seems to follow by the same kind of necessity as that which we recognize in the working of a machine; in which, when a movement of a definite kind takes place in one part of the mechanism, a definite movement necessarily results in some other part of the mechanism, and just that particular motion and no other is possible at that time. Now inorganic nature at least presents this mechanical aspect; this feature of it is so fixed and so persistent that there is forced upon our minds the conviction that every phenomenon, every thing which comes to be, is the inevitable outcome of its antecedent conditions. If, now, we extend our survey over the organic kingdom, in the lowest forms at least we can discover no departure from this machine-like behavior; the seemingly spontaneous movements of the microorganisms are determined by mechanically acting stimuli, and the answering reaction is mechanical to this extent at least, that the action performed, the responses, movements, are in every instance the only ones that are possible in the given circumstance. The processes which go on in the organism are, in the ultimate analysis, physico-chemical in character, and do not differ, save in complexity, from those which go on in inorganic nature; and organic behavior appears to be as much the mechanical resultant of these processes, as the behavior of inorganic bodies is the resultant of definite physical forces.

If we ascend to the higher level of organisms with a nervous system, we do not find the mechanical form of

action superseded by action of a different type; the processes which go on in the most complex nervous system are reducible to molecular movements, as mechanical in character as are the motions of bodies in the external world. Reflex actions are executed with the same undeviating regularity, the same inevitableness and exclusion of alternative actions, which characterize the motions we see take place in the inorganic world; if we cannot predict the actions of living beings as we do the actions which occur in non-living beings, it is solely for the reason that they are determined by infinitely more complex conditions, not because they are determined in a different manner; every action or movement of an organism is the resultant of its internal conditions, as they are themselves determined by environmental conditions, or have been so determined; both sets of processes, those within the organism and those without, appear to be mechanical; and the behavior of the organism, its reactive movements, etc., are, to all appearance, of the same type, namely, mechanical; they are determined by antecedent conditions, and not by ends or purposes.

But how is it when we come to the level of distinctly conscious behavior, and especially our human actions? Are we not confronted by a condition of things which makes the mechanical method of explanation totally inadequate, if not wholly irrelevant? Are not such undeniable things as ideas, purposes, intentions, the explainers of the actions which follow them, in a very different sense from that in which the motion of the body A explains the motion of the body B? We cannot, therefore, assimilate the actions of intelligent, feeling, and purposing beings to the type of mechanical actions; to do so, is to overlook their significance,

and to leave them unexplained; and the point here urged is, that our actions are not related to our purposes and aims, as are the motions of physical bodies to antecedent conditions. If we permit ourselves to say, our ideas, our purposes, cause our external actions, we do so in a different meaning of the term from that in which we say the billiard ball A by its impact caused the ball B to move in a certain direction. Actions are the expressions of purposes, *not* the effect; the bodily movements, the words and deeds of our human fellows, are the symbols of their thoughts, their emotions and their wills; not *effects*, not *mechanical resultants* of their inner states. It is the plan in the mind of the architect, the ideal of the artist, which explains the building, the painting, the statue; take these away, and that part of the result which must be attributed to them, and you have only a shapeless pile of stone, a mass of paint and canvas; eliminate the non-mechanical constituent in this manuscript that is being all too slowly and too poorly elaborated, and what remains are characters in ink, on sheets of white paper. Mechanical processes doubtless are involved in the formation, the disposition and in the spatial arrangement of each letter, each word, which compose this manuscript; but they do not explain this piece of philosophical discussion that is going on in these written characters, any more than the mechanical processes which undoubtedly had for their result the Parthenon or Saint Peter's dome explain these structures. And what is true of these productions of human art is true of organic structures in nature; it may be shown that mechanically acting agencies have terminated in the insect's eye, the eagle's wing, and the still more marvelous eye of man; but they do not explain the significance, the function of

these organs; the flight of the eagle, the minute seeing of the insect, the uses of the human eye, are something more than resultants of mechanically operative agencies or conditions. To say the insect has this microscopic vision, because it has eyes, the eagle flies because it has wings, and man fashions his wonderful structures because he has hands, is to stop far short of the goal in our explanation; do we not need to reverse the terms of this statement, and say, the insect has multiple eyes in order to see, the eagle its powerful wings in order to sustain his long flight, and man has hands that he may create works of art? Are we not constrained to view these adaptations as more than mechanically attained results?

Can we escape the conclusion that in some way these ends had to do with the processes through which they are realized? This raises the question of the validity of the teleological principle in the explanation of nature. We have seen that the proposition, nature is mechanical in all her ways, is justified by the facts of observation and secure induction therefrom; the reign of mechanism is indisputable. Is the proposition, nature is teleological, at least in some of her ways, susceptible of proof? Is explanation by ends as legitimate as explanation by antecedents? Here is the point at which the issue is joined between the teleological and the antiteleological theories.

Teleological explanation is undeniably valid in the realm of human action and productions; teleology is at home in our human world; History is teleological or meaningless; to eliminate ideas and purposes from human productions were to destroy the moral, the historical and political sciences altogether, in short it were to make the study of mankind

a meaningless undertaking. The issue between mechanism and teleology centers in the question, is organic nature teleological, or is mechanism the only valid principle of explanation in the phenomena of living beings? That organisms are unlike physical bodies, that impulses, cravings, purposive actions, characterize the behavior of living beings at a certain stage of development, the upholder of the purely mechanical explanation does not deny; nor does he deny that adaptations, the fitness of organic structures to certain functions, say flying, swimming, pursuit and capture of prey, are facts; what the advocate of the purely mechanical explanation *does* deny is, that these adaptations, the performance of these sorts of actions, were factors determining or guiding the processes by which the organism with its adaptive structures came into being. Now this is just what the teleologist must maintain; and the dispute between them narrows itself to this question, have the organic structures which abound in nature, existed as ideas, and in that ideal mode of existence controlled and directed the agencies or conditions by which they have been formed? Or, to reduce the question to more exact terms, have the adaptations of the different species of plants and animals to their environment been operative as an idea, determining or guiding the forces by which adaptive structures and then consequent functions have been produced?

The teleologist answers this question in the affirmative. He maintains that the assumption of an end-seeking agency is the only rational explanation of such structures as we find everywhere in organic nature; indeed, so he contends, a single organism, with its parts and special organs, each implying the others, and dependent upon them for its

function, is inexplicable, if viewed as the product of merely mechanical forces; organic beings are inexplicable, unless we assume they are the product of a labor working to an end, and that in some way the end yet to be directs the labor by which it is made actual. And, continues the teleologist, whether we conceive this directing, controlling agency as a distinct form, and extraneous to the forces it controls and directs, or as imminent in them, as the inner nature of these forces, which seem to act blindly and with mechanical necessity, is immaterial; we must recognize a teleological principle, locate it where we will, and conceive its nature and mode of operation in whatever manner we choose.

The teleologist supports his doctrine by three lines of argument, as follows:

1. The alternative to teleology is in principle the old theory of a fortuitous coincidence of purely independent and blindly acting agents. The alternative is either purpose, or chance; a third alternative is not possible. The problem is, to explain the coincidence, the converging of a number of independent agencies upon one result; for instance, the production of a seeing eye, a wing that enable the bird to fly; not only the coincidence of independent agencies in the production of a single organ, or an individual organism; but the tout ensemble of organisms and their relations to each other and to inorganic nature. This is the problem, and the argument is, that the alternative solutions are teleology, a purposive agency, or chance. To attempt to break the force of this reasoning, by substituting for chance causation, law, is not relevant; for the crux of the antiteleological argument is, in the unity of

result produced by the action of several, yes a multiplicity of separate agents, all of which by the supposition are acting without the control or guidance of a principle which takes account of the end that is attained. Nor is this difficulty overcome, or in any degree lessened, by invoking the aid of evolution; for it is indifferent to the significance of the final outcome, whether the process by which this result has been reached was gradually effected by successive increments of slight changes, a process extending through a vast period of time, or, whether the process be one of short duration, and one making great and sudden change. If there was no end-seeking and directive principle at work it remains just as inexplicable how such phenomena as organic nature presents came about by evolution, as without evolution. Evolution affords no escape from the dilemma, unless evolution is itself a teleological process.

And this leads to the second argument:

2. The antiteleologist in his appeal to evolution is slain by his own weapon; evolution is a meaningless conception, or rather a word without meaning, if we eliminate from it the conception of an end; evolution is a teleological process, or it is a name without a meaning; the purely mechanical evolution involves a contradiction in terms. Therefore, to explain by evolution, and at the same time to deny the validity of the teleological conception, is a self-contradictory procedure. The antiteleological evolutionist, if sincere in his undertaking, deceives himself; he tacitly employs a conception which he should discard; his seeming success in dispensing with teleology is due to his failure to recognize the true nature of the method he is using, in other words he is a teleologist without knowing it.

3. The third argument in support of the teleological explanation is derived from the teleological character of our human actions. Man is either supernatural, or he is a part of the cosmos; in this part of the cosmos teleological action is as undeniable as the reign of law in the physical universe. But, if the doctrine of evolution is valid, teleological processes are not peculiar to man's world; they must be coextensive with organic nature, or continuity, which is the working assumption of evolution, is broken. Unless nature is teleological, there is a gap between nature and man; and this is something which no consistent upholder of the doctrine of evolution can admit. The alternative would seem to be, either there is no teleological action in the human world, or nature, out of which man has come by evolution, is teleological also.

But this argument, which is based upon the continuity of man's life with the life of the sub-human kingdom, is strengthened by a collateral argument which, though analogical, is very strong. There is an identity between the productions of human art and organic structures which are produced in nature; this identity holds between those marks in human productions, which demand a teleological explanation, and certain marks observed in the productions of nature; and if it be a valid principle of reasoning, that like effects are produced by like causes, it would seem to be incontrovertible, that if these productions in the human world necessitate the inference to a teleological cause, or agent. Productions in nature which exhibit the same marks justify the inference to teleological cause as their only adequate explanation. Take, for example, the watch in the famous argument of Archbishop Paley, and the human

eye. A comparison between these two structures shows that in certain points they are closely alike, we may say identical, in other respects they are manifestly unlike; the contention of the teleologist is, that analogy between the watch and the eye holds in the circumstances which are essential to it—the circumstances which are material in the reasoning; while the circumstances in which these productions differ are not material to the inference drawn. The agreeing circumstances are: (1) Adaptation to a specific purpose or function; in the case of the watch, measuring time; in the case of the eye, seeing. (2) The concurrence of a number of different processes in effecting this structural adaptation, the several wheels, springs, and their use in enabling the watch to keep time, the various parts of the eye, the processes which go on in each, and on which sight depends. (3) The peculiar relation between these parts and these processes, each part of the watch, each movement within it, so adjusts itself to the other parts and movements within the watch as if it took account of them, and knew just what sort of structure and what manner of behavior the function of the whole structure required of it; this relation of interdependency and mutual adjustment is the third circumstance in which teleological productions of man agree with the productions of organic nature.

Now, in our human world, whenever we come upon a production or a structure, which presents these three sets of marks, we do not hesitate, nay, we are rationally compelled to assume a teleological agency, a labor working to an end. And this connection is unaffected by any knowledge we may have, or not have, concerning the particular mechanical

processes or agencies by which this structure or organ was formed; whether the watch was made by hand, and we observed the watchmaker in his work, or whether it was made by a watch-making machine, or, let it be even supposed the watch *grew* or gradually came into being we know not how; that which compels and justifies our belief in an end-directed agency of some sort remains the same.

Now, when we find the same set of marks in the case of organic structures, can we avoid the same inference to a teleological principle, or agency, in nature? Let us assume that we know the method of nature in the production of the eye; suppose that this method includes a great number and variety of processes; and suppose that this eye structure is the final stage of a long course of development, would this fact affect in any manner the belief that the eye and its vision was an end toward which all these forces were directed?

IV. OBJECTIONS TO TELEOLOGY

I have thus presented what I am disposed to think is the strongest argument for the teleological interpretation of nature. Let us now hear what answer the anti-teleologist will make to this reasoning. He will reply:

1. "The teleological agency, if there be one, nowhere dispenses with the need of mechanism; this agency is nowhere effective, in no instance attains its goal, without the cooperation of conditions and agencies which are mechanical. Furthermore, wherever we are able to comprehend these conditions, and the agencies which operate mechanically, the result for which the teleological explanation is claimed, is just that result which is necessary in the given conditions; this is

true even of the productions of human art, man produces nothing by art, by a designing intelligence, which is not absolutely the product of mechanically acting forces.

2. "In the second place, granting that teleology is indisputable in the human world, it does not follow that it is necessary or admissible in nature; it does not involve a break in the continuity of evolution to admit a teleological agency in man's world, and to deny the necessity of it in the subhuman kingdom; continuity or evolution does not exclude the coming in of something new, something not strictly identical with what already is. Mind need not exist in matter, even potentially, in order that the law of evolution shall not be broken. A teleological principle or agency does not therefore need to be assumed in inorganic nature, because it exists in a more advanced stage of evolution. The teleologist's argument from the supposed continuity of evolution is without force.

3. "Nor" continues the rejecter of teleology "is the denier of teleology forced to face the alternative of teleological explanation or chance explanation, which, of course, is really no explanation. The time was, when the denier of teleology could be challenged to explain, in what other way could the wonderful adaptations and organs in plants and animals have been brought into existence; but now that time has passed, thanks to the discovery of natural selection, a vera causa in nature, the way out of that dilemma is open. Evolution by natural selection quite dispenses with a teleological principle; at this point the contention is, that if evolution by natural selection is a third alternative, this part of the argument for teleology breaks down. And this leads to the only really substantial argu-

ment for the teleologist's position, the argument from the analogy of organs and adaptations in nature to the productions of human art. All the evidence there is of purpose in nature is drawn from this assumed identity between the marks of such purposive agency exhibited in the human world, and marks exhibited by organic nature. Now, the nerve of this proof is analogical inference, a form of inference which is relatively weak in its best estate; and in this instance weak, because of the necessity of passing beyond the field of our human experience, within which verification is possible. Our knowledge that our actions are teleological is solely experiential; directly experiential in case of our personal actions, and indirectly experiential in case of the actions of our human fellows; it is the uniformity of our experience, and that only, which constitutes the strength of our belief in teleological agency in the human part of the cosmos; for example, the strength of the belief, that the watch which Paley's man stumbled upon in crossing a heath had a contriving mind for its author, was the uniform experience, that such a mind has always been the antecedent fact, when a watch comes into existence. Now, so long as our observation is limited to products of human art, we are certain that a purpose or intention or design was their antecedent condition; but, when we pass beyond the sphere of our human actions and their products, we can at best possess no such certainty, and our belief, if it is to rest on rational grounds, will be weakened just in proportion as we have reason to suppose that the ways of the cosmos are unlike our ways. Let us suppose Paley's watch-finder had stumbled upon an eye; now, granting that the eye presents a set of marks, very

closely resembling those marks from which was inferred an intending mind in the case of the watch, would he have been justified in inferring a non-human, a nature mind, as the explainer of the eye? Hardly so. He would remind himself, that the two cases are separated by an important difference; he has had experience of watch making, of eye making he has had no experience; he does, however, know that in other respects nature's methods are very unlike the art of man; he would consider too, that nature possesses resources infinitely more vast and varied than we have yet suspected; but, what is of decisive importance, this finder of the eye, if he had chanced to read the 'Origin of Species,' would find it quite impossible to regard this eye as the product of an intending, purposive, thought; on the contrary he could only view it as the final outcome or result of a natural course of things, in which there is no trace of a forelooking, a guiding agency; but the natural, the inevitable result of prior and contemporaneous conditions. Thanks to the discovery of natural selection we know the way in which nature produces these marvels of adaptive structures, to which the teleologist could always so confidently appeal, and which, before Darwin's time, did indeed present an insoluble problem for the anti-teleologist. And we now see that nature's method is totally unlike our human art; our teleological agency; and therefore the argument, resting wholly upon analogy, utterly breaks down. It is this demonstrated unlikeness between the method of nature and the agency of man, which has given to the famous teleological argument of Paley its death blow."

"Examination of this method of nature in the production

of organisms and their adaptive structures, shows that a teleological agency is entirely superfluous, if it is not inadmissible; for what is this method of which nature brings into existence these structural adaptations in plants and animals? Briefly it is the following: (1) Offspring resemble the parent organisms, they tend to repeat or perpetuate the structure of the parental or ancestral organism. They also tend to be unlike the parent organism, to vary in almost all points of structure. (2) Organisms tend to multiply at such a rate as to create a vast excess of living beings over means of subsistence. (3) Organisms are exposed to hostile environmental conditions; they must struggle for existence not only against these adverse physical conditions, but also against other organisms that are their competitors for the means of subsistence.

"Now, with these facts before us, we can understand how natural selection has operated in bringing into existence through a very long period of time such organic structures as the eye, the wing, the wonderful structures seen in the vegetable kingdom as well. These adaptative organs have come to exist, because only those creatures which possessed them have been able to exist, have survived in the struggle for existence. These structures have been gradually formed by the accumulation of variations, each variation in the direction of better flight, better seeing, etc., being of decisive advantage to its possessor, a very slight variation being enough to determine whether the individual should survive or perish. Now, we may call this agency of nature, selection; but it is quite unlike man's selection, though it may lead to a like result; nature selects by dooming the unfit, by elimination of those organisms which are ill-adapted to the con-

ditions of life; those only are chosen, which happen to possess the adaptive organs which the existing conditions call for. Now, this selective agency of nature is clearly not purposive; at all events, it need not be so; there is no evidence whatever that it is teleological. The factors operative in it are causal, and *blind as to their effect.* Natural selection wholly dispenses with the need of a teleological principle in explaining the facts of organic nature. We shall not say such and such special organs were made, in order to enable their possessors to live, but only those beings which possessed these organs have been able to live; thanks to the circumstances of having better organs, these creatures have survived while countless thousands which did not have them perished."

"But," the teleologist will reply to this reasoning, "natural selection may be the true account of the way in which the species of plants and animals have been created, but nature can be teleological, and we have here a strong disposition to see in nature something which is akin to our own minds; the impulse to interpret organic phenomena everywhere teleologically, is, as natural, as strong as the disposition to employ the causal principle; both are rational methods of dealing with our world, and there is no good reason for limiting the use to our human world." "Nor do naturalists themselves resist this propensity to explain special organs in teleological terms, and to use such terms as for the purpose, in order that, to this or that end, indeed, it is more consonant with our rational way of dealing with phenomena, to put functions before structure, and to make a given structure intelligible from the point of view of its function, rather than to explain a function from the structure with which it is correlated."

"Moreover, is it not true that the behavior of all living beings whose inner states we can in any degree represent to ourselves is teleological no less than our own behavior? No living being in action is a mere machine; instincts, impulses, cravings, feelings, the will-to-live, is no affair of mere-mechanism; there is a movement to an end, motived by something which seeks—*or tends toward*—what is not existent, rather than just blind vis a tergo. The model of a machine or a configuration of molecules in motion does not describe the behavior of the lowest forms of living being; every such being seems to reach forward, to act *for* something rather than *from* something which merely drives it as a wheel in a machine moves its neighboring wheel, a body, the body it impinges upon, by *mechanical thrust* or *blind force*."

"There is room in nature for both mechanically operative agencies and for teleological action. Why may not those variations the accumulation of which the Darwinian naturalist supposes to have resulted in the formation of such structures as the eye, have been led along in this useful direction by an intending mind? Indeed, why may not natural selection itself, and all it presupposes be a method through which a teleological agent attains is end? Everything takes place under the operation of mechanical principles, everything obeys causal law, but the causal, the mechanical, are not ultimate principles; they are methods through which ends are realized. The machine which made the paper on which I am writing doubtless explains the existence of this particular piece of paper; this sheet as to size, texture, lines, etc., could not have been other than it is, given the material of which it is composed and the sum total of the

mechanically operative conditions to which that material was subjected. But surely this mechanical explanation does not exclude a teleological interpretation of the same fact. The mechanical in this instance must itself be teleologically explained; but for a purposive mind, the machine would not have been. The only point that is material, is that a purposive agency works through mechanical processes to the realization of an end, and in so doing subordinates the mechanical to the teleological."

If it is objected, that we do not know the ends which this supposed cosmic mind has before it, while we do know to some extent the method of nature's working. Who can declare to us her intentions, her meaning, the *ends* she has in view? The cautious teleologist, instructed by the lamentable failures of the narrow teleology of the Eighteenth Century, will frankly confess we know nothing in detail about the teleological agency; whether it is intelligent in any respect after our human type or not, whether it possesses infinite intelligence or only finite intelligence, whether all powerful or of limited power only, whether good without admixture of moral imperfection or evil in some degree. Organic nature certainly does not reveal infinite intelligence or unlimited power or perfect goodness; nay, she gives but few indications of the being which is behind her wonderful but mysterious life; but the teleologist contends, that the ways of the cosmos, and in particular organic nature, discloses other than merely mechanical agencies. We carry into the world which surrounds and contains our human selves two assumptions or postulates; the postulate of universal *causal connection*, mechanical regularity in the behavior of the cosmos, and the postulate of teleological processes;

our experience in part verifies both, but in very unequal degrees and in quite a different meaning of the terms. If nothing more is meant by the mechanical character of the cosmos than the routine which we observe, and the universality of which we postulate, certainly both our common experience and our empirical science bears out this postulate; we describe the universe in terms of causal transaction and machine-like regularity; so far as we possess accurate, scientific knowledge that knowledge is in terms of this description. But this knowledge stops short of the goal of our desire to know our world; the nature of that whose phenomenal processes we have learned to formulate and describe by means of these abstract conceptions, the meaning of the deeper reality of the world, is the quest of our reason; and this deeper meaning can be expressed only in teleological terms. We can describe what merely is, or what comes to be, the manner of its coming to be, the observable processes which go on in it; but were the real world only that, it would be meaningless and without value, just cosmic weather; the demand that the real world shall mean something, that it shall have value or include values, be something which can be appreciated as well as described, is deeper in our rational nature than is the want we satisfy by merely empirical science.

PART II

EPISTEMOLOGY

CHAPTER VII

THE DOCTRINE OF KNOWLEDGE

In this part of our study we shall be mainly occupied with three theories of knowledge, three solutions of the problem which our cognitive experience presents. But before entering upon an examination of these doctrines, we must first get ourselves oriented with reference to these problems, and the different solutions which have been attempted.

THE MEANING OF KNOWLEDGE

The first question which naturally comes before us concerns the meaning of knowledge, what is it to know? Our starting point shall be a provisional definition to this effect. Knowledge is the certainty that something is. This definition brings into view a distinction which is fundamental to the meaning of knowledge. This distinction is that of knower, the knowing act or process, and the thing or object known. Knowing and someting known are ultimate and inseparable facts in our cognitive experience. We shall see that the central problem of knowledge concerns these two things and their relation to each other. Our definition gives us in the term certainty, the ultimate and irreducible fact on the side of the cognitive process or state. Psycho-

logical analysis, introspection, and definition can go no farther; when we know, we are certain; that term describes our mental state or states and is the differentia of cognitive experience. We can, I think, distinguish three kinds or modes of experience; we can characterize them by three expressions which Mr. Ward has suggested: "I know somewhat, I feel somehow, I do something." The cognitive, the feeling, and the willing functions or phases of our mental life are well marked off in this way. Now the term certainty, being certain, undoubtedly differentiates the cognitive form of our mental life.

But is all certainty knowledge? Whoever knows is certain; but does everyone who is certain also and for that reason know? Is not the superstitious man, the fanatic, as certain as the calm thinker who can demonstrate the existence of what he is certain of? Nay, is not the sufferer from delirium certain of the existence of the objects which appall and torment him? Must we not therefore amend our tentative definition by adding something which enables us to distinguish knowledge-certainty from certainty which is not knowledge? Suppose we define knowledge as certainty which rests upon objective grounds; by objective grounds we will mean a certainty which all minds could have in the same situation, a common certainty instead of a merely individual or private certainty. This criterion of knowledge certainty is empirical. In a given situation in which I might be certain, I could not determine whether my certainty is knowledge-certainty, unless I was also certain that all minds in my situation would share my certainty; but how could I be certain of that fact? Would I not need to use the same criterion again, in order to gain cognitive certainty

of this third fact, and so on? Would I ever get the cognitive certainty of the first fact by this empirical criterion? A cognitive certainty is doubtless one which all minds could feel in the same situation, or about the same matter; but the difficulty is to determine in any specific instance, whether or not we have that kind of certainty.

Thus the criterion proposed seems to be entirely unserviceable; it seems to commit us to an endless regress; the fact of which I can never be cognitively certain, is that my certainty is or can be universal. But may we not find the criterion of knowledge-certainty somewhere in the knowing process itself? So that it may be possible for the knower to know that he knows? May not the knowing process afford evidence of its own validity? It is customary in epistemology to distinguish two forms of knowledge, immediate and mediate. The former is direct, the latter indirect. In immediate knowledge, knower, knowing and thought and object known are, so to speak, face to face; they are in direct connection, in touch. This is the case in experience; to experience is to know; the experiencing is the knowing or gives directly or at first hand the knowledge. Thus I know my here and now, my present mind states and my immediate surroundings because I experience them. The certainty I have about these things is indefectible, and needs no justification. Mediate knowledge as the term implies, is brought about through an intermediary operation or process of which knowledge-certainty is the result, or *terminus ad quem*. The essence of both immediate and mediate certainty being knowledge, their difference is the way in which this certainty is produced. In immediate knowledge it comes directly out of experience, is the fruit of that

experience. In mediate knowledge, the certainty is the outcome of a process or operation which starts with some datum of known fact, and working from that and upon that, issues in another fact. Now may it not be in this mediating operation, this intermediary process, that we find the criterion of knowledge-certainty? This process is self certifying, and carries a warrant for the truth of the connection in which it issues. For instance, a mathematician, after going through an operation of construction and reasoning comes to a conclusion or result, of the truth of which he is absolutely certain; this complete certainty which does not permit him to think otherwise, has its source, its justification in the mental processes through which it is reached. In point of intensity and completeness, the mathematician's certainty is not greater or more compelling than is the certainty of the passionate religious believer; but do we not rightly say that the mathematician knows? while of the other man we say that he believes but does not know?

This difference in the character of the certainty state in the two cases is clearly due to the difference in the sources and grounds of this certainty in each case. The religious believer's emotions, his desires, the yearnings of his heart, may be the sole cause of his perfect certainty that the object of his emotions, the satisfier of his desires and yearnings, exist; but we do not say the cause of this state of mind is also a justification of it, as we do say in the case of the mathematical thinker, that the cause of his being certain is also the justification of his being certain. But this point will come up again, when we are examining the theories of knowledge.

Meantime we must deal with another problem growing

out of our present undertaking, namely the problem of the object of knowledge.

In knowing we know an object. Now the question which is raised by this fact is, is this object independent of our knowing act or process, so that our knowing and all the operations involved in knowing make no difference to this object, or is this object to some extent at least determined, made to be what it is, by the knowing process? This question states the issue between two epistemological doctrines, epistemological realism and idealism. The realist asserts that things known may continue to exist when they are not known, or that things may pass into and out of the cognitive relation without prejudice to their reality. Things known are not products of the knowing relation, nor are they dependent for their existence and behavior upon that relation. These two propositions state quite clearly the doctrine of epistemological realism, the essence of which is that knowing, while it makes a difference to the knower, makes no difference to the object known; the only thing we can do about reality in our cognitive behavior is to know that reality as it is, while it remains unaffected by our knowing it; we cannot both know and make a change in the thing we know. epistemological realism must not be confounded with the doctrine which is commonly called realism; that is a metaphysical doctrine; it maintains, as we have seen in the discussion of dualism, that in perception the object perceived is non-mental in its nature. This non-mental nature of the object is an essentail part of metaphysical realism. For the epistemological realist, the object can be mental or psychical as well as material. A realistic epistemologist who should have observed Robinson Crusoe sitting in

solitude upon his rock, would have had two sorts of objects both equally real, Robinson Crusoe's mind and the rock on which he was sitting. Epistemologically considered, these objects would have been real for the same reason. One thing more is important to an exact statement of the realist's position. The realist does not maintain that a real object cannot be changed by our action; he does not necessarily hold that reality is static and unchangeable; he admits that we alter and increase the reality of the world. What he maintains is that our cognitive action or knowing does not change or affect the existence and the nature of what we know. His contention is that were we merely knowers, our real world for us would never change. The supposed observer of Robinson Crusoe might doubtless have changed both the mental object and the material object of his knowledge; he might have persuaded Robinson to leave his rock, and he might have destroyed the rock with dynamite; but those operations would have been quite distinct from the cognitive process, though they might have gone on in very close connection with each other.

In opposition to this view of the cognitive relation, the anti-realist maintains that the knowing process and the object known cannot stand in a relation in which one of the terms, the object, is independent of the other, the knowing act. No knowledge is conceivable if such be the relation between the knower and the thing to be known; unless in manner, the cognitive process determines its object, unless it works upon it and gives it a character, a significance in accordance with its own principles of working. He contends that the realist's object since it is independent of our cognitive thinking, cannot even be thought about;

no conception or idea can be relevant to it; it can therefore have no meaning, no definable content; and such an object, if we can call it an object, is absolutely unknowable. This must suffice for a statement of two doctrines which grow out of the central problem of knowledge and which have come quite to the fore in recent epistemological discussions. We shall come back to them for fuller discussion in connection with the three leading types of episte, mology, which await our study. Before passing to this part of our task, however, I must briefly elucidate one more special problem, which is intimately connected with the problem of the object in knowledge; it is the problem of Truth. The problem relates to the meaning of truth. We shall do well to avoid for the present, the abstract term, truth, and state the fundamental question in concrete terms. Our question, therefore, becomes, what is a true idea, a true concept, a true assertion? The ajective term, true is properly used, only as the predicate of an idea, a thought, a judgment, etc., and our question is, what is the meaning of this term so used? We shall later see that two leading doctrines in epistemology are sharply opposed by the answers they give to this apparently simple but really cardinal question. We shall also see that the answer one gives to this question, is determined by his conception of the nature and function of thinking, by his conception of the cognitive relation, and to some extent by his conception of being, or ultimate reality.

Suppose that one is a realist, then he must mean by a true idea, one which agrees or corresponds to, or somehow copies its object. This is all our cognitive thinking can do about reality; it can in no wise determine the nature, the mode of

existence or the relation the object shall sustain to our minds; there is only one thing the knower can do (provided he really can do that) that is, to have a true idea of the object; his knowing consists in his consciously having such an idea. Just what it means or really is for an idea to agree with or correspond to an object, and especially the sort of object realism supposes, and how the would-be knower can tell when he has a true idea, are questions which we must face farther on. I raise them here merely to bring out the character and the significance of this question about the meaning of truth. The anti-realist, as we shall see, gives a different answer to this question. Our cognitive thinking, at all events, helps to make the object, and co-determines its meaning. Then a true idea has quite a different function, and sustains a different relation to its object, from the function and its relation in the realist's doctrine.

A few words upon the meaning of the substantive term, truth, and we are ready for the main business we have taken in hand. It will conduce to clearness and safeguard us from errors, if we keep in mind that truth is simply an abstract term, the connotation is determined by the connotation of the concrete term true; it is a convenient, general name for true ideas, true judgments, etc., and just as every abstract idea, it must always be reduced to this concrete connotation, if we want to avoid the tendency to make entities of abstract concepts, and treat them as objective realities. The concept, truth, is particularly exposed to this mistreatment; thus, we find it is made the object, the content, or the subject matter of knowledge. Now, to identify truth with the object in knowing, to use the term as synonymous with reality, creates confusion, and is seri-

ously misleading; it would be better in our thinking and philosophical discussion, even at the cost of circumlocution, to avoid the use of this abstract term altogether.

The various theories of knowledge can be reduced to three types: they are rationalistic or empirical or pragmatic. Rationalism is the oldest of these general theories and has the prestige of long tradition, and the support of great thinkers. Empiricism stands for the most part in antithesis to rationalism, and historically arose, in part, as a reaction from it, in part from the establishment of the modern physical sciences. Pragmatism is closely related to empiricism, shares with it an almost unqualified opposition to rationalism; but has important features in which it differs from empiricism. In its fundamental principle and spirit, pragmatism is not new, but as a developed theory of knowledge, it is of recent date, and just now may be said to be strongly in the field.

We will begin our study with rationalism. I will first state the essential doctrine which all rationalists, however widely they differ on subordinate points, hold in common.

I. RATIONALISM

Rationalism is the doctrine which teaches that reason or thought is the source and affords the constructive principles of all knowledge. Reason or intellect operating in the form of self evident judgments, or by processes of reasoning which rest upon such judgments, is the creator of scientific knowledge. However much the mind may be affected by the action of objects upon our senses, however dependent our knowledge may be upon such affection of sense for stimulus and for data upon which thought acts, it is solely

in virtue of its own self originated operations that the mind attains to knowledge. Sense experiences may supply the stimulus, the occasion, but knowledge is not born of experience. Only as the data of experience are elaborated by a power that is quite other than sense or memory or imagination, is there such a product as knowledge. The older rationalists concede that, without these *a priori* principles, we might possess knowledge of individual objects, and particular truths about them, but they maintained that knowledge of particulars is contingent, and not entitled to be called true or scientific knowledge. The content of genuine knowledge are universal and necessary truths; and such knowledge is possible only if our reason itself, independent of all contingencies of experience, is the source of principles or judgments, which being self-evident, are the foundation of scientific knowledge. The whole body of scientific knowledge is possible only if there are principles of thought, which not being derived from experience, are valid for all possible experience. This statement covers, I think, all the essential points in the doctrine of rationalism.

Proceeding now to an examination of this theory of knowledge, we note as the first important point the rationalistic conception of the knowing process. This process is purely intellectual thinking, following certain laws or regulative principles as the source of all knowledge which is not immediate. Feeling and will do not enter into the cognitive process as such; all knowing is an affair of intellect: intellect is the source and intellect supplies the criterion and determines the validity of knowledge; we penetrate reality, know its nature by our intellect. This is the sole organ of knowledge. The reality we know may afford us pleasure or pain,

may excite our wonder, our admiration, or our aversion; it may call forth our love or provoke our hate, it may also call forth our active response. We may seek to possess it for practical uses; we may seek to change or destroy it; we may act toward it in all sorts of ways and suffer variously from it; but this object, this reality must first be our known object; and it is by intellect alone that it *is* our known object. Wants, hopes, fears, the demands of our active natures may dispose us, may compel us to believe this or that concerning the real world, but it is intellect alone which judges our beliefs, decides upon their claims to truth. The right to believe is determined by the intellect. The second point to be noted in the rationalist's theory is his conception of the cognitive relation. The rationalists before Kant were realists. Kant was the first to bring in an important modification of rationalistic epistemology on this point of the object in knowledge. For the pre-Kantian rationalists the problem was to explain how there can be knowledge of an object which is independent of the knowing process. If the object is in no way determined by the knowing thought, how is the thought able to know it?

As we have seen, on this view of the object, the only relation between the knower and the thing known is the relation of an idea to its object. The idea does not determine its object, the object remains unaffected by whatever the idea may do or intend; the only thing the idea *can* do, is to be true or fail of being true of its object; and this trueness of the idea we are told, is its agreement with, or correspondence to, the object. But what is it for an idea to agree with or correspond to an object? Realistic rationalists have not until recently been aware that this question is pertinent and

really serious for their theory. The difficulty involved has not been apparently perceived. Instead of defining truth as the agreement between thought and reality, let the truth mean the identity between the thing in fact which is asserted, and what really exists. My assertion is true if what I assert is as it is asserted. But the definition of truth in terms of assertion, evades rather than solves the difficulty. Some realists stay resolutely by the abstract definition and maintain that the terms agreement, correspondence, need no explanation; the definition is reduced to its simplest terms already. But is there not a real difficulty here which the epistemologists of this class have not rightly faced? We have no difficulty when we are seeking for correspondence, agreement between two objects, two spatial figures or two series of numbers, etc., in defining our meaning. But can agreement, correspondence mean the same thing when one of the things compared is an idea or thought? In what way or in what intelligible sense of the term can an idea agree with, correspond to, an object which by supposition is nothing to this idea, is wholly independent of it? This question can hardly be dismissed as idle or captious. It brings to light a serious difficulty, which the upholders of realistic rationalism do not appear to have recognized. But let us suppose this difficulty is removed and we have a clear conception of this truth relation between idea and object. The question then comes, how is this agreement between idea and object, between our thought and reality brought about? The idea does nothing to make the object agree with it; the object does nothing to the idea to make it agree with itself; how then do they come into agreement? Our thinking follows its laws, and things independent of our thinking

follow their own laws; how explain their agreement? Interaction being excluded there seems to be but one explanation, pre-established harmony as in the case of Leibniz's monads; it must be assumed that our minds on the one side are so constituted, and the real world on the other side is so constituted, that there is a parallelism between them. The basis of this parallelism of thought and the world have to be sought in the nature of being.

But, waiving this difficulty, another one meets us; it relates to our possible knowledge of the object. Granted that I have a true idea of a given object, say conditions on the planet Mars, I do not yet know that fact, unless I know or am certain that my idea is true. Now how can I possess this certainty? How can I tell whether my idea is true or false? There is only one way in which this knowledge would seem to be possible; there must be something in my idea itself, which affords the infallible sign of its truth, something in my mind must authenticate my thinking, something analogous to a bell that rings, when one has hit the target. The most consistent of the older rationalists boldly maintained this self-evidence of truth, this criterion of knowledge within the idea itself. "For a man to say," declares Spinoza, "that he has an adequate idea and yet he does not know whether that idea is true or false, is the same as to say that he has an idea, yet does not know whether he has an idea or not." Spinoza's way of facing this difficulty is the only one for a consistent rationalist of the older type; an heroic expedient but a fatal one. It was this failure of the earlier rationalists to explain knowledge and truth which led Kant to abandon its realistic epistemology, and in a large measure its realistic metaphysics.

But may not the realistic rationalist overcome this difficulty by the following expedient; namely, Treat the given idea as an hypothesis and develop the consequences which follow if the idea is true; then a comparison between the consequences and the already know facts will afford the criterion of knowledge. Thus my present idea of the planet Mars is now true or false. Let me suppose the idea is true. Then if Mars is as I think it, certain phenomena should be observed, it should behave in a certain way, other facts in the planetary system should be observed; now suppose subsequent observation discovers all of these deduced from the supposed conception of Mars; and, let us further suppose that no other conception of Mars will lead to the facts; should I not be justified in holding my idea to be true? In other words, would I not have attained the knowledge that my idea was true? If so, then it would seem possible for the realist to verify his ideas, or to know that they are true; or failing to verify them, know that they fail of being true. Of course, this verification is a thing of degrees, it can be slight, barely enough to establish just a probability; it can be complete and the probability of truth would then be close to certainty, so close as to exclude any serious or significant doubt. This expedient might afford the realist a solution of his difficulty; but it would not be available for a realist who was also a rationalist. Thoroughgoing and consistent rationalism cannot admit experience as an element in knowledge. It can accept no criterion of knowledge derived from experience. The method of verification suggested would contradict the fundamental principles of rationalism. The older rationalists were quite aware of this fact; and hence rationalistic philosophy has never recognized the method of

hypothesis in knowledge; for the method is essentially empirical.

But the rationalist philosopher need not be a realist in his epistemology. Since the time of Kant the great rationalists have rejected that doctrine. Beginning with Kant an idealistic epistemology has prevailed in the main tradition of philosophy. The essence of epistemological idealism is that the knowing process determines the object. To some extent, at least, it creates this object, or if it does not in proper meaning of the term create its object, it so far predetermines its character, as to place the criterion of knowledge within the knowing process. Now, it is possible to admit that thought or the knowing process does not create or predetermine all that is real, all that pertains to the object and yet to maintain that this knowing process does create or predetermine reality so far as we know it at all. The residuum of reality which does not come within the sphere of knowledge, we may distinguish as thing in itself, or things in themselves; and consequently, the objects we know are phenomena. The substance of this view is, that our knowing thought creates, predetermines the reality it knows; but there is reality which it does not determine and therefore, does not know.

It is also possible to maintain that knowing-thought and reality are coextensive; that all that is real is known by the same knower, is that knower's object, and is wholly created or predetermined by that knowing process. Clearly we have here two points of view and two forms of idealistic rationalism, determined by the point of view taken. In one of these forms of rationalism, the point of view taken is our human intelligence, assumed to be finite and which does not

in its knowing transcend its finiteness. The point of view in the other doctrine is that of an Absolute Mind, an All-Knower of which our human minds are assumed to be finite parts, fragmentary portions, in essence identical with one all inclusive and containing mind, only different as the part or the fragment differs from the whole, the partial from the complete, the imperfect from the perfect. Hence, what this Absolute Thinker thinks, what he knows, is identical with that which our human, partial, and fragmentary minds *would* think and know, were they simply made complete and perfect. So far as we know, we know reality as it is, and not as it appears. I have thus outlined two typical forms of idealistic rationalism. The difference between these doctrines is important enough to justify a more particular study. I shall therefore select two philosophers as representatives of these epistemological doctrines. Kant is the representative of the doctrine which makes our human mind the only knower. I select Professor Royce as the best representative of the doctrine which makes an Absolute Mind the knower.

II. KANT'S THEORY OF KNOWLEDGE

We will first study the rationalism of Kant, which is contained in the famous *Critique of Pure Reason* and also in *Prologomena to Metaphysics*. Kant began his philosophical career an othodox rationalist. His earlier writings give no hint that he did not find that doctrine satisfactory. But the time came when, despite the natural conservatism of his mind, he no longer accepted the rationalism in which he had been bred. He was forced to recognize a contradiction between traditional rationalism and what he regarded as the

indispensable facts of the world. Kant was too thorough and too appreciative a student of the new science of nature to question its claims to actual knowledge; and between the teachings of science and the rationalism he had held, there were discrepancies he could not remove; and science had disclosed facts for which rationalism could give no explanation. One of these facts was the behavior of two physical bodies, meeting each other in motion. Kant saw that the natural law of contradiction did not explain the behavior of these two bodies; indeed, this law was distinctly contradicted by the fact of action and reaction. The significance of this single discovery was momentous for Kant; for he saw in it an irreconcilable contradiction between his hitherto accepted theory of knowledge and the real world as physical science was revealing it. Kant soon made other discoveries which brought him to the point of definitive abandonment of traditional rationalism. It was clear to him that rationalism did not explain our knowledge of nature. Kant could as little question the existence of a science of nature as the existence of the science of mathematics; and his rejection of traditional rationalism was because it completely failed to explain this science. Kant formulated the problem of knowledge in the two questions, How is science of mathematics possible? How is the science of nature possible? Now, the substance of the famous *Critique of Pure Reason* is the answer to these two questions. Kant's originality lay in his way of answering these questions. Kant distinctly claimed that no one before him had taken the path he had entered; that no philosopher had solved these two problems. Rationalism had accepted mathematics, nay, made it the type of true knowledge; but rationalists had not solved the

problem of this science, had not given the right answer to the question, How is the science of mathematics possible? Rationalism, of course, could make nothing out of the science of nature—much less solve the problem it presented. The empirical philosophers, Locke and Hume, while they accepted with the rationalists the science of mathematics, could not answer the question, how is such a science possible? And as to a science of nature, this they distinctly denied. Locke had expressly asserted, we possess no scientific knowledge of nature, and Hume's doctrine had come to the same result. Now, against both the rationalists who had preceded him and against the empiricists whom he at one time seemed to be on the point of following, Kant asserts the equal validity of these two sciences, and undertook to explain their possibility. It has been objected that Kant had no right to assume the fact of a science of nature; his first question should have been, is a science of nature possible? Not how is such a science possible. Kant's answer to this objection would probably have been "In explaining how a science of nature is possible, I have at the same time established the fact of this science."

The presupposition of Kant's epistemology was that the problem of our human knowledge had before him not been rightly understood, much less solved. It is to this fact that Kant attributed the deplorable state into which metaphysics, at one time the queen of sciences, had fallen. It was both distrusted and despised. Philosophy can regain her former respect and authority, only if a new foundation can be given it, and that foundation is the solution of the problem of knowledge. Now one reason why Kant's rationalistic predecessors had failed to solve the problem of knowledge,

was the realistic assumption regarding the object in knowledge, and consequently their wrong conception of the nature and the function of knowledge. They had assumed that the aim of knowledge was in some manner to copy or reproduce in the mind, objects which exist wholly independent of the knowing process, things in themselves. The only function of our minds in relation to such objects, must be to copy them, or reproduce them in the form of ideas or judgments. Hume had drawn the right conclusion from this conception of knowledge; he had shown that even did an agreement between our thought and objects of this kind exist, there is no way in which we could be rationally certain of it; and consequently we possess only a knowledge of ideas, no actual knowledge of matter of fact. The rationalistic criterion of truth is merely subjective, it can merely tell us whether or not our ideas are consistent with each other, whether or not they are formally true, never whether or not these ideas are objectively true. Now Kant frankly admitted that, upon the assumption that things in themselves are the objects of our knowledge, the problem of knowledge is insoluble, and Hume's scepticism was unanswerable.

But, just in this realistic conception of knowledge lay the root error of preKantian rationalism. Against this doctrine Kant maintained that the objects of our knowledge, the field of science, the real world which it is the aim of science to know, is not a realm which lies beyond the limits of experience, occupied by so-called things in themselves; the objects we know, the only objects we can know, are objects of possible experience, not objects out of relation to experience; there are no such objects. By objects of possible experience, Kant means objects which exist in, as well as for,

our experience, objects which are presentable under conditions of experience, and are definable in terms of experience; as to content, they do not differ from Berkeley's objects of perception; they are actual and possible sense perceptions, groups of sensibles. Thus, does Kant introduce a profound modification in the doctrine of rationalism, with the important consequence that he incorporates a part of the opposing doctrine of empiricism, namely, that experience is essential to our knowledge, that it affords the test of validity, and determines the limits of our knowledge.

The second error Kant discovered in the older rationalism, was the conception of the source and method of our human knowledge. But empiricism was likewise in error on the same point. On the side of rationalism, the error related to, the nature, the function of thought in knowledge; on the side of empiricism, there was an erroneous conception of the function of experience in the production of knowledge. Rationalism had maintained that thought alone, operating in accordance with its own immanent principles, creates its knowledge; and it rejected experience as a source or factor in knowledge. The empiricist had maintained that experience alone is the original source of knowledge; all our human knowledge is from experience was the dictum of empiricism. The empiricist denied that thought is an original source of knowledge. Now Kant found a measure of truth in each of these hitherto antagonistic doctrines; each doctrine was in part right in what it affirmed, and in part wrong in what it denied. With the rationalist, Kant asserted that thought is an original and indispensable element or factor in knowledge; with the empiricist, Kant held that without experience, and apart from experience we possess no

knowledge; experience is an original and indispensable factor in knowledge. Kant's solution of the knowledge problem unites the part truths in both these doctrines, neither of which by itself is true. Neither thought alone, nor experience alone give knowledge; both must be united as cooperant factors, if we are to explain knowledge. The rationalist was right in his insistence upon a universal in knowledge. It is the function of thought to supply this constituent. But it is true also, that our knowledge must have matter of fact, concrete reality in its objects, otherwise it is formal only; experience alone can supply the matter of knowledge, or rather matter as the data for knowledge; this was the truth in the doctrine of empiricism.

We must therefore (to follow Kant) recognize two distinct and original sources of knowledge, and assume that though different in their natures, they cooperate in the production of knowledge; our knowledge is due to a synthesis of these two principles. Kant claimed that the analysis of knowledge discloses the cooperation or synthesis of these two functions; one he calls sense, the other understanding. Sense supplies two constituents, matter of sensation, which he calls intuition and two forms of synthesis of the mainfold of sense, which he calls intuitions of space and time. The understanding furnishes the formative, constructive, and regulative principles of knowledge; these form giving and moulding principles Kant called the categories. They are such concepts as substance, number, quantity, cause, etc. These thought functions, taken apart from the matter supplied by sensation, can give no knowledge of objects, any more than a paper-making machine can make paper without pulp, or a loom weave a fabric without raw material which can be fashioned

into the patterns. On the other side sense experience without thought, can give no knowledge; for sense experience furnishes the raw materials for knowledge; and but for the operation of thought, this material would remain raw material; just as the material of the paper would remain pulp, if it were not taken up and wrought into paper. "Intuition without understanding is blind and understanding without intuition is empty," said Kant. Thus, by a process crudely analogous to that of weaving cloth by a loom, does Kant suppose the consituent factors, thought and sense are woven into the fabric of knowledge. Of course, the difference between the mind and a machine working upon dead matter is very great; but as Kant seems to look at the matter, there is about as little inner connection between understanding and sense, as there is between the loom and its fixed patterns and the raw materials of which the cloth is made. Our thought never supplies the matter of its objects; and this sensation matter never takes form of itself; how these are brought together, how this peculiar synthesis of things which in their natures are assumed to be so unlike, Kant does not, I think explain.

But in order to make clearer Kant's meaning, and to bring out the particularity of his epistemology, I will take one or two concrete illustrations. Let us take first the perception of an object. We have two classes of elements which enter into the formation of this object, (1) sensations, cold, pressure, smell, taste, etc. (2) a certain order or arrangement and connection which this matter, these sensations assume, and must assume in order to become an individual object. One of these form elements is space; the sensations of themselves do not give this form or order of arrangement; by

themselves they are a chaotic manifold. This space form is given to the matter of sensation by the mind, just as the particular pattern or design is in the loom, not in the material which is fashioned by it. Again it is not in the sensation matter, the raw material, that we find the unity-giving principle, the synthetic unity whereby the mass of sensations becomes one individual thing; this unity-giving function belongs to the mind, the understanding. In its pure form it is the logical category of unity, and of subject. This individual object is consequently the product of the cooperation of these two in their natures different factors; sensations and the form-giving and individualizing principle supplied by the understanding.

Take next an example of causal connection. If we analyze this experience, we find two facts; one is the succession of perceptions, which may be the perceptions of the individual mind and may be a reversible succession; the other fact is that of a succession in time which is not that of an individual mind only, but of all minds; an objective succession in time. Now in order to know a causal connection between two phenomena, I must know that the succession in time is objective; the succession in time must be a necessary one. Such a knowledge and such a fact is possible only if my mind supplies for itself the necessary condition of such a succession, and that condition is the logical category of condition and consequence, which is contained in the hypothetical judgment, if A is then B is. Only as the sense impressions are brought under the thought-law or form, can I know such a thing as an objective succession in time, in other words causal connection; for causal connection is objective succession in time. The knowledge of causal

connection is not derived from experience as empiricism teaches; it is possible only if there is brought to experience, a thought principle by means of which experience is brought into this form of connection.

Thus does Kant explain the structure of our knowledge. The limitation of our knowledge is a corallary from the doctrine of its nature. Experience being a necessary condition of knowledge, sense function being one of its factors, the limitation of knowledge to experience follows inevitably. Experience is the field of possible knowledge; where that field terminates there our knowledge ceases. On this point of the extent of knowledge, Kant is at one with the empiricists and against the rationalists, who maintained that our knowledge transcends the bounds of possible experience. True it is that our thoughts transcend these limits of experience; but thought without matter supplied by sense, gives no knowledge. We can, indeed, form conceptions of objects which cannot be given in experience, such are things in themselves; we can conceive of beings who do not exist under the conditions of experience, who do not know the forms of space, time, and the categories which are regulative for our knowledge. Such are *noumenal* beings, God, our moral selves, and their free action. Moreover, in the interests of our moral life, which is the supreme reality, our reason postulates real existences which answer to these ideal concepts; but it remains true that we do not possess knowledge of the realities, we necessarily conceive and postulate; for they cannot be given as objects of possible experience, they cannot be determined, or defined by means of the categories, the function of which is limited to experience Theoretically taken the ideal of God, of absolute being, of

unconditioned first cause, etc., have only regulative value: they are not constitutive of knowledge. By means of these ideals we can give systematic completeness to our knowledge of the world of experience; but to take these ideas as existences is fallacious. There is no theoretic need of postulating their objective reality; and there is no way in which it is possible to demonstrate their objective existence.

Now Kant maintains that, to admit things in themselves, while we confess that we do not have knowledge of their nature, is no contradiction; nor is the conception of such objects as these ideal beings, a useless excise of our reason, an idle fancy. The recognition of things in themselves is absolutely essential to the explanation of knowledge. They supply the matter of sensation, without which no knowledge is possible. Moreover, it is important that we recognize reality which is not subject to the conditions of our knowledge; it is important to remind ourselves that our human modes of cognition may not be the only form of knowledge; and most important of all is the fact that since the interest of conduct or morality is the supreme interest, it is imperatively necessary to postulate reality which transcends experience, and therefore the limits of our knowledge. Now, were it not possible or legitimate to think such objects as God, freedom, immortality, our rational nature would indeed be at war with itself; for our reason as practical postulates these objects; and if we could not think them without contradiction, belief in them would be irrational, and absolute doubt be the inevitable result. But now, our moral faith is justified, our right to believe cannot be denied. In Kant's esteem, it was a great merit, a great achievement of his doctrine, that while it establishes the exact bounds of

our knowledge, at the same time it saves our faith. Kant declared that he had taken away knowledge that he might save faith, by which he meant he had destroyed a spurious claim to Knowledge beyond the limits of possible experience. It was the dogmatic assertion of this knowledge which had provoked scepticism; for the sceptic challenged this claim; and had only to instance the conflicting doctrines of the rationalists, the disputes among themselves, to feel justified in his denial of this knowledge. But the sceptic was no less dogmatic in his denial of the possibility of this trans-experience-knowledge, than was the rationalist in his assertion of it. Kant claimed to have put to silence both the sceptic and the dogmatist; and in this way he had saved moral faith. It seemed to Kant that he had clearly separated the two spheres, that of knowledge and that of faith, so that henceforth one could render to science the things that belong to science and to faith the things that belong to faith. There can be no quarrel between science and faith; for science does not deny the reality of what it does not know and faith does not ask that her realities shall be scientifically known; she asks only the right to believe; and science cannot deny this right.

I have now set forth in its main lines the epistemology of Kant. It would be the more natural order to pass to the epistemology of Royce, who I have said is the best representative of the other type of rationalistic epistemology. But it will be more advantageous, first to present the epistemology of empiricism; and from the empirical point of view to suggest a criticism of Kant's doctrine of Knowledge.

III. THE EMPIRICAL THEORY OF KNOWLEDGE

Accordingly I will set forth an empirical theory of knowledge which in the main follows the constructive lines of Hume's philosophy as that is presented in the *Treatise on Human Nature* and in the *Enquiry concerning Human Understanding*. The fundamental proposition of empiricism had been laid down by Locke. All our knowledge is derived from experience. Hume, following the main lines of Locke's epistemology, sets out with an analysis of experience, with a view to finding the sources, the elementary constituents, the first things in the way of knowledge. It was clear to Hume's mind that if it is to be maintained that all knowledge is from experience, it is first of all necessary accurately to understand what experience is, what are its constituent elements, its orginial content. The problem is at the outset a psychogenetic one; it relates to the origin of the earliest state of our knowledge. How does knowledge begin? is a question which must precede the question, How is our knowledge constituted? An examination of experience is therefore the first step in the solution of the problem of knowledge.

In this analysis Hume finds that the ultimate source, the elementary constituents of knowledge are impressions of sense; these impressions and not things or qualities, producing these impressions, are the beginning of our knowledge, the content of original experience. Locke had said all knowledge begins in sensation; but with Locke sensation contained two things, sensation matter, color, pressure, light, smell, etc., and something which itself is not a sensation, but a material thing or its quality producing the sensation, something sensed in the sensation, something ex-

perienced in our first experience. Hume rejected this really trans-experience thing, and made impressions the sole content of our original experience. Whether or not there are such beings as Locke's material substance, or Berkeley's world spirit, to which our sensations are to be referred, Hume neither affirmed nor denied. This further question as to the ultimate source of our experience, Hume maintains, admits of no positive answer. For the explanation of our knowledge, we do not need to concern ourselves with such speculative problems. Our experience being what it is, we should add nothing to its meaning, did we in some way know how we came to have such experience. Impressions are consequently all we have for the stuff out of which our knowledge is made.

In addition to these sensation contents of experience, we have as the second class of constituents of knowledge, ideas. These are not absolutely first things, they are not data of experience, but derivative or secondary in the order of genesis. In their simplest form, ideas are copies of impressions, they are mental things which stand for and represent what has been or can be, impressions of sense, or feeling of some sort. Viewed in their relation to experience content, ideas are either copies or representatives of what has been experience content, in which case they are memories or they may image or represent what is possible experience, in which case they are imagination ideas. In respect to their structure, ideas are simple or complex. Simple ideas are copies or representatives of the simplest content of experience. Complex ideas are formed by combination with more or less modification of simple ideas. They can image or represent an indefinite number of individual

objects or masses of experience content, of indefinite extent and complexity. Again, in respect to their function, ideas are individual or general. An idea is individual if it represents what we call a single thing, or a unit of some sort. An idea is general if it represents an infinite number of individual things.

One more distinction between ideas must be noted, that of concrete and abstract. A concrete idea is one which represents an experience content, which we call a thing or object, and think of as so existing. An abstract idea represents any one or more qualities, when considered apart from the thing itself.

So much for the meaning and the various kinds of ideas. We will next follow the empiricist's explanation of the function of ideas, the rôle they play in our knowledge. Ideas being copies or representatives of experience, actual or possible, they can be substituted for experience, they can function in the place of experience, for what is past, for what may be expected, for the experience of an individual or for common experience. Ideas are thus instruments for enlarging and making practically serviceable our knowledge. Ideas are thus indirectly cognitive; we could not by means of them know what has not been or could not be matter of experience; they never carry us beyond experience, but within that field they are of immense service, of indispensable mportance; but for them knowledge would be only of the flying moment, just a this, now, a meaningless fragment. The whole organization and extension of knowledge is the work of ideas. To understand, however, this function of ideas, it is necessary to note a third class of elementary constituents, or constructive principles of experience. These

are relations and connections of various sorts between the parts of our experience. Our experience does not consist of isolated or disconnected things, but of things connected with other things; we experience not merely impressions or things, but relations between them. Relation is not something that is brought into experience *ab extra;* it is an intrinsic thing, a part of experience. Relations are experienced with the things related. They are as truly a part of the given—the content of experience—as are the things between which they exist. A and B, A after B, A greater than B, like or unlike B, are the experienced facts, the empirical reality. Relations therefore are original content of experience no less than the related things. So we have also ideas of relations apart from the objects which are connected by them; then we have ideas of likeness, succession, continuity, etc. Not all these connections in Experience are original. Some are of later origin and are due to those processes by which complex and abstract ideas are framed; such for instance is the relation of cause and effect, the explanation of which is Hume's most important contribution to epistemology. Now, inasmuch as our ideas cover these relational parts of our experience, it can readily be seen how important is their rôle in the building up and organization of our knowledge. We can comprehend the power of our ideas in enlarging the range of knowledge and practical activity, the enormous economy they enable us to practice, since they are to a large extent abstract and have an essentially symbolic function, like numbers, signs, etc. This function of ideas as substitutes for experience, and as economical devices is analogous to the use of cheques in business transactions.

A cheque is a substitute for so much actual cash; but it is not necessary to cash a cheque in order to use it; it is only necessary that it should be cashable. So with an idea, its cash value in experience, we do not need to obtain, it can be used for the experience, and with an enormous gain in efficiency and saving in time. As in business, so in our knowledge, most of the transactions are by cheques and by credit statements. But the empiricist reminds us, that it is just as important to keep in mind that every idea should be reducible to concrete experience as that every cheque should be good for its face value in cash.

But, fully to explain the organization of experience or empirical knowledge, it is necessary to take note of two principles which operate to give to experience its persistent character, its solidity and stubbornness, against tendencies ot change, its consistent character. These principles are habit and association. One of the most conspicuous features of experience is its routine character, its tendency to persist in whatever state it occurs, in whatever direction it takes; custom is the name Hume gives to this character of our experience. The law of habit is, the same experience tends to recur in the same context, and this tendency is strengthened by repetition. This holds true not only of the substantive part of experience but of the relational parts also. Not only does the content A tend to recur, but if A has been followed by B in prior experiences, or coexisted with B, this relational experience tends to recur, and this relation of conjunction in experience is affected by repetition in like manner as are other parts of experience.

Association is the second principle under which experience acquires its definite, coherent, and stable structure.

Association itself is based upon the more extensive law of habit. The law of association is, if two or more things have formed parts of the same total experience, the recurrence of any one of them in a subsequent experience tends to recall the others. This associative connection is strengthened by repetition and habit: it may be strong and persistent without having become habitual; recency, intensity, and other circumstances of original experience, strengthen the associative connection. This principle of association is the basis of memory and expectation. It is also the principle of discursive inference or reasoning upon matters of fact.

Association based upon habit is the main source and explanation of our beliefs. Belief is the manner in which ideas are present to, and are entertained by our minds. To have an idea of something and to believe this same thing differ only in the manner in which the same object is present in experience. Belief adds nothing to the meaning or content of the idea; my belief that I have a hundred dollars in my pocket adds nothing to the content of my idea of my having this sum of money there. But in the case of my belief I cherish this idea in a different way; the idea is present in a different manner, and has for its associates quite different feelings and dispositional tendencies. This lively, vivid, warm, and firm manner in which certain ideas exist, is the essence of belief; and the differential of belief are the accessories and associated experience states. It is consequently clear that association strengthened by habit, is the foundation of belief: for in belief the mind is carried from some present fact to some other fact that is present in an idea; and that which carries the mind to the other fact is association. Now whenever a firm association is es-

tablished between two things, one of which is a present fact of experience, which we always entertain with the sense of reality, we entertain the associated thing (present as idea) with the same feeling of reality; and that as we have seen is the essence of belief. Now our beliefs are a large part of our experience; they constitute the cognitive significance of experience. In varying degrees of strength, ranging from slight probability to the most intense and unshaken convictions, our beliefs are the warp and woof of our knowledge, and construct for us the real world. Our real world is coextensive with our experience; experience which has been, which is now, and that which we expect. The content of our knowledge of the real world are our beliefs. Hence, to explain our knowledge, our science of matters of fact, is to explain our beliefs. When we have explained our beliefs we have reached the limits of our knowledge; we have solved that problem so far as the solution is in our power. Our knowledge is wholly experiential, its source is experience, the knowing itself is a process of experience; the cognitive process essentially consists in the linking of one portion of experience to another. In this process, ideas play the rôle of intermediaries; and inasmuch as ideas function in the place of active experience, the cognitive connections are between ideas, as well as between experience portions. Now since an idea is only a substitute for experience, experience content is the only object an idea can have; and consequently the truth of an idea is its agreement with experience, and not with an object that is independent of experience, a trans-experience object such as realism assumes. Just here Locke fell into a fatal embarrassment in his conception of knowledge. His definition of knowledge made it consist in

the perception of the agreement between two ideas. This definition was inconsistent with other parts of his doctrine, particularly his doctrine of material substance, and of primary qualities of material objects. Locke was forced to modify his definition so as to cover the simple ideas of sensation; for as he maintained, the truth of these ideas consists in their agreement with material reality, *i.e.*, with something which is not an idea. Now, had Locke been consistent with the fundamental doctrine of his empiricism, he would not have been entangled in this difficulty. But Locke unfortunately retained a part of the realistic rationalism of Descartes. And that prevented his seeing that the cognitive relation is not between an idea and a reality which is different from the idea and alien to it, but between two experiences, or between an idea and an experience, or between two ideas, since ideas are the equivalent of experience.

I have thus in as brief a compass as seemed possible, presented the epistemology of empiricism. It will, I trust, aid the student in a better comprehension of both this doctrine and the idealistic epistemology of Kant, if I bring the two doctrines into comparison. This comparison I can best make by means of an imaginary dialogue between Hume and Kant. I will suppose that Hume had lived to read the *Critique of Pure Reason*, and had fallen in with Kant and the following discussion occurred between them.

Hume: I have read with the greatest interest and appreciation your truly immortal *Critique of Pure Reason*, and I am naturally gratified to find that between your doctrine and mine, there does not appear to be a difference of any importance. You no less clearly and emphatically than I, teach that our knowledge is limited to experience. You no

less emphatically than I reject the claim to a knowledge of such trans-experience realities as material substances, the soul as a spiritual substance, God as an infinite, unconditioned being.

KANT: I fear you have not carefully read my book, or you would have seen that the difference between our doctrines is a profound one. Your doctrine takes away all true knowledge within the field of experience, while my doctrine establishes knowledge. I not only establish knowledge but I also delimit the field of knowledge; while you establish no knowledge and you leave the boundaries hazy and confused. Your doctrine denies that there are principles of thought, which not being derived from experience are independent of experience for their validity. Now unless there are such *a priori* functions as I have discovered, no such thing as true knowledge is possible. In your doctrine there are only impressions of sense, their paler copies, ideas, merely contingent connection between these impressions and ideas; these connections made more or less firm by habit or blind custom. These are the only constructive principles your theory assumes. Now with such principles only it is impossible to construct or explain our knowledge.

I have shown that only principles and judgments that are universal and necessary, can be the foundation of scientific knowledge. Now you teach that we have no principles or judgments of this character, that no connections between things are necessary; you thereby abandon the claim to scientific knowledge. Take that connection which you admit is the foundation of all scientific knowledge, nay of all reasoning on matters of fact, cause and effect. This you claim to have shown is not a law of thought, not a truth

of reason, but a customary conjunction of experience; the only necessity that attaches to it being the blind propension of our minds to generalize from experience, and to expect that like antecedents will be followed by like consequents. Your doctrine of causation takes away the corner stone of science, nay of all knowledge. To sum up on this point, The difference between us is this, I have saved knowledge from possible scepticism, you have involved all knowledge in doubt.

HUME: If you have indeed demonstrated the existence of such non-empirical principles, and have also demonstrated the manner of their operation in the making of our knowledge, I grant you have established universal and necessary truths about matters of fact; But have you in fact achieved this momentous result? There are three conceivable ways in which the existence of such *a priori* constructive principles in our knowledge can be proved. (1) Either by direct inspection we must find them in our minds at work in the making of knowledge, or (2) they must be self evident truths, or (3) the supposition of them must be the only possible explanation of our experience. Now I do not know how it may be with you, but as for myself, looking never so carefully and critically into my own mind to see how it works, I do not discover there such principles or functions. In my experience I can find no judgments that are universal. I do find various connections between things or parts of experience, but that they are universal or necessary is no datum of my experience. And I suspect the case is not otherwise with your own experience. I think you will not undertake to maintain that the existence of these principles is a self-evident truth; You have learned too well the lesson of dogmatism for that. There remains only

the third way in which you can establish your proposition. Let us see if this way is feasible. The alleged fact, the explanation of which is possible only if we suppose there *a priori* principles, is the science of nature. You assume that science consists of judgments or truths which are universal and necessary. Now it is that assumption which I challenge. Do we possess such truths? Does our science consist of them? If we do possess this kind of knowledge, I grant that this fact can be explained only by the supposition of such *a priori* functions as you maintain. This fact must be established and this is what you have not done. My contention is that scientific propositions are neither necessary nor universal; these propositions assert what has been found true in past experience and will hold true for experience in the future. Scientific propositions express beliefs which because they have been uncontradicted by experience, we hold with an assurance which both for theoretical and practical purposes, is as good as certainty. We cannot demonstrate the truth of these beliefs; but so long as experience supports them, we have no practical interest which leads us to question their validity, and a merely theoretic doubt is gratuitous. That which we have no motive for doubting while all our interests are promoted by believing it, is for all our human purposes, as good as demonstrated certainty. But, granting we have the kind of knowledge you assume, is the explanation you give of it really so intelligible and undeniable as you appear to think? Is it intelligible how such things as the categories of thought, having in their nature no essential relation to the matter of sense experience, can unite with this matter in the production of knowledge? How pray do these thought forms

manage to act upon matter which comes from a source which is alien to them? For instance, how does the space principle, itself purely formal, and indifferent to this or that particular manifold of sensation, act upon this matter so as to give a definite spatial extent or create an individual object, having definite form and size? What determines where the spatial synthesis begins, where it terminates in any particular case? Does the sensation matter come provided with cues to indicate how the spatial arrangement is to proceed? Now, sensations, qua sensations, have not a spatial character already, or a predetermination to assume a spatial form, how then does your theory explain the fact that they come into this, that, and the other spatial form? Again, take an individual object, how let me ask does your category of substance, which as you say is the abstract idea or logical priciple of subject in relation to possible predicates, manage to grasp and unify a mere manifold of different and in themselves unrelated sensations? What is it which determines the number or the kind of sensations or particulars of sense this category is to grasp and to unify at any given time? The empty formal category of substance tells us nothing, explains nothing in this formation of individual, concrete objects. Here is a rose, does your category of substance explain why and how just these particular sensations, different in kind, and degree, and definite as to number, are united or synthesized to form this object? What after all guides the category, itself formal and indifferent to sense matter, in its work of uniting just these particulars of sense in just this manner? Finally, does your theory explain the fact of causal connection? You claim to have established the universality of this connection between

phenomena. How have you done it? You bring in the logical principle of the hypothetical judgment. If A, then B, and you assert that by applying this principle to the empirical succession of events, that succession is made objective, is therefore valid for all experience, because it is brought under principle of a judgment which is universal. Now what I utterly fail to see is, that you have made out any connection whatever between the formal principle of the hypothetical judgment and the empirical fact of succession of the one event upon the other. Do you maintain that if two things are cause and effect, the connection between them must be of the same nature as the connection between the antecedent and the consequent in the hypothetical judgment? If so I reply, that is a pure assumption, it begs the whole question. Do you reply that unless these phenomena are connected in this way, causal connection cannot be universal. My answer is, causal connection is not known to be universal; it is believed to be so on the strength of uniform experience. But my point now is, assuming that we do certainly know that causal connection is universal, your theory does not explain this knowledge.

This imaginary dialogue has served its purpose if it has brought into clearer light the main difference between the two older and most opposed theories of knowledge. We must now complete our examination of the rationalistic theories of knowledge. This we will do by a brief examination of the epistemology of Royce.

IV. THE EPISTEMOLOGY OF ROYCE

Perhaps the most noteworthy feature of this epistemology is Professor Royce's conception of the nature and function of

thought and the relation of thought to reality. The essential problem of knowledge Royce finds in the meaning of an idea, and the relation between an idea and its object. How can an idea have an object? is the formulation in simple terms of the Kantian question, How is knowledge possible? The epistemology of Royce diverges from Kant's doctrine chiefly at these two points, (1) the cognitive process, (2) the object in knowledge. In other words, the essential points are, the knower and the knower's relation to the object. We take these points in order.

In Kant's epistemology the knower is our human and consequently finite mind; and the knowing process being that of a finite mind, is to some extent conditioned by reality that it does not make. In the epistemology of Royce, the knower is not a finite mind only, but the finite mind viewed as a partial function within an absolute mind. The knowing process is interpreted and valued from the view point of this Absolute, whose knowledge is not fundamentally different from our human knowledge, but rather the complete attainment of that goal toward which our finite knowing strives, but of which it falls short in its endeavors. The object of this all-knower's thought is the complete and determinate expression of just that idea which, in every act of our knowledge, is seeking this embodiment and expression. This absolute mind knows just what our minds would know, could they adequately know. This differenc in view point in the conceptions of the knower has an important bearing upon the other features in which the two theories differ. One highly important consequence of this difference in view points concerns the limitation of our human knowledge. Both Kant and Royce admit our ignorance; but

the locus of this ignorance is different in these doctrines. In Kant's epistemology, the *terra incognita* is the Absolute, the All Knower, God. In the view of Royce, our most profound ignorance relates to the finite, the realm of experience. The only reality we are sure of is God, the All Knower. We cannot miss this fact in all our misdirections and errors of thought; we cannot deny the existence of the One, All Knowing, All possessing Being if we would do so. There is no possibility of losing, there is no escape from this All Knower; for there is absolutely nothing which is not known; every fact in virtue of its meaning as fact, is a known fact. Every truth, every aim to win truth, is known, every failure to win truth, every error is also known. The very possibility of truth or error is without meaning unless the Absolute knower of both truth and error exists. To assert truth or to admit the fact of error, is to appeal to this standard mind, this judging Thought. We may formulate more incisively this really momentous difference between the two epistemologies in this way. In Kant's doctrine, God is a theoretical possibility, his existence is not known but practically postulated. In the doctrine of Royce, God's existence is a theoretic necessity, an inescapable fact. On the second point we have selected for comparison the knowing process and its object, the difference is very wide. As we have seen, both Kant and Royce reject epistemological realism. In both doctrines, the knower determines, in a sense creates his object, so far as that object is known. But the meaning of this object and the nature of the process through which it becomes known is very differently conceived by Kant and by Royce. In Kant's theory, the object-determing or creating-function, consists of so-called categories of thought

and forms of sense, space, time, which work somehow upon matter, sensations supplied by a thing in itself—reality. In the theory of Royce, this object-constituting function is something which is both an idea, a thought and a purpose; it is a purposive idea. It is something which means and intends its object; it selects and chooses that object as the object in which its own meaning can be embodied, its purpose be attained, its seeking issue in finding. For the object sought cannot have anything in it which is foreign to the idea which seeks it. There is no residual stuff, thing in itself which cannot be object of this idea, nor merely given matter, chaotic manifold of sensation. No, the object is only the complete determination and embodiment of this idea's meaning, the attainment of its goal, the realization of its purpose. It is clear that Royce has eliminated the entire machinery of Kant's categories, and *a priori* synthetic judgments, his pure intuitions of space and time, matter of sense and things in themselves. Consequently, he has escaped all those embarrassments under which the Kantian epistemology labors, and the objections which the empiricist has always successfully urged against Kant's doctrine, do not touch the theory of Royce. Criticism of his doctrine must come from another quarter, and must attack other points if it is to find anything wanting in this marvellously subtle and suggestive doctrine. The presentation of it I have attempted is altogether meager and fragmentary. No one can rightly judge this undertaking of Royce, the greatest since Hegel, who has not gone most carefully through *The World and the Individual*, a book which will make a landmark in philosophy.

We have completed our discussion of two types of episte-

mology, rationalism and empiricism. There remains the third type, the epistemology of Pragmatism, to which we now pass.

V. THE PRAGMATIC THEORY OF KNOWLEDGE

The pragmatist's theory of knowledge is based upon a psychological doctrine, the main features of which I will first set forth. The first characteristic of this psychological basis of pragmatism is the intimate connection which it maintains, holds between the psychological and the logical character of knowledge. The pragmatist insists that the psychological, the genetic view of knowledge cannot be separated from the logical and epistemological problems. If we would understand what knowledge is, we must understand how it has come to be, we must follow its history; the problem of origin is not separable from the problem of nature and validity. The question, how *do* we think? and the question how *ought* we to think? cannot be answered independently from each other. It is customary to distinguish between psychological thinking and logical thinking in the following way: Psychology deals with thinking in an essentially descriptive way, it regards it as it does all psychical processes, something to be described and explained, as all mental events and processes. The aim of logic, on the other hand, is to ascertain how thinking *ought* to go on, if it will attain its aim, which is truth and knowledge. Logic defines the principles and laws that are regulative for valid thinking. Now this distinction rests on the assumption that to our thinking, if it is to possess a logical character or have epistemological significance, something must be added which is not found in the empirical character

of our thinking. Now the pragmatist challenges this assumption of a fundamental difference between the psychological and the logical character of thought and knowledge. He denies that there is a difference of any significance between the *is* and the *ought to be*. His contention is that the only way of knowing how men *ought* to think, is to know how men *do* think, when they are successful in their thinking; thinking being a tentative operation, the correctness of which is determined by its results. Laws of thought are statements of the methods of *de facto* successful thinking. The pragmatist maintains we can solve the problem of knowledge only if we approach it from the side of psychology; for it is first of all a psychological problem. Approached in this way, the problem of logic and epistemology, which is inseparable from logic, becomes intelligible. Logical principles, laws of thought, etc., connote simply those ways of actual thinking which have been found expedient in the attainment of certain ends. These ways described in general terms, stated in general formulæ, are regulative for the individual thinker, who can by this aid draw upon the collective experiments of the best representatives of the race back of him. They enable him to back his thinking with the best prospect of success, and to solve various problems which he would not have been otherwise able to solve. This successful experience of generations of thinkers, summed up in canons of Logic, is authority for the individual thinker. The meaning of the logical ought, like its analogue, the ethical ought, is, if you would be successful, effective; in your thinking, you must think as all have thought who have successfully solved their problems. Thus does the natural history hold the key to the epistemological problem.

The second psychological fact which constitutes the basis of pragmatic epistemology is, Thinking and knowing do not exist for their own sake; they are not ends in themselves, but means to other ends. Man originally did not think for the sake of thinking or seek knowledge for its own sake; the imperious need of living, of maintaining his own existence in a world more hostile than friendly forced him to think and to make his thinking an instrument in effecting a successful adjustment to his environment or in controlling the conditions about him, so as to secure the satisfaction of his wants. Nor has man's development, his civilization, his science changed essentially the function of thought and knowledge. They continue to play essentially the same rôle in the life of the civilized man of to-day which they played in the infancy of the race. Life is the end, the will to live the supreme force; knowledge is the instrument this will employs to attain its end. It is true an individual may limit his conscious aim to the attainment of knowledge; practical uses of knowledge or ends to be gained through knowledge may lie beyond his voluntarily narrowed horizon; but this fact does not militate against the position that some end which is not itself knowledge, determines the value and ultimately justifies the pursuit of every particular piece of knowledge. It is also true that an individual may dissociate by habitual practice, thinking and knowing from the ends which give them meaning and value; and he may come to think they are valuable in themselves, and that he has a purely theoretic or intellectual interest, which would remain did he know that knowledge was never and could never be of any use to any living being. Just as the miser dissociates money, the instrument and symbol of wealth, from

wealth itself and thinks it valuable for its own sake. But this fact does not affect the contention that, but for some end which is other than knowledge, knowledge would have no meaning or justification as an end. The position remains unshaken that in the economy of life, intellect plays the rôle of instrument and means, and this as truly in the human kingdom as in the animal world. Circumstances disguise this fact on the high level of man's life, with its infinitely greater complexity and vastly wider range of activities and interests; but the same cardinal trait belongs to man's life and to the life of the animal below him, the subordinate place and the instrumental function of intellect.

The third fact in this basis of pragmatism is, The very intimate and indissoluble connection which exists between those functions which it is still customary to distinguish as intellect, feeling, and will. The psychologist for his special purpose finds it convenient to distinguish these aspects or phases of our mental life; it is psychologically justifiable to say, I know something, I feel somehow, I do something; but the psychologist knows that no one can say, I know something, without feeling somehow and doing somewhat in the same experience. These processes never go on independently of each other; and each is qualified by the other's presence.

Now the position of the pragmatist is, that in cognitive experience there is something quite other than coexistence of these three functions, or even than a certain reciprocal influence and mutual dependence between the intellectual and the other two functions. He maintains that it is never the case that we first know, *i.e.*, get reality into our possession by intellect, then feel somehow toward it, or act in

some manner upon what is already known reality, or adjust ourselves in some way to this reality. On the contrary, he maintains, every cognitive idea is a purpose, an intent, a will. Every congnitive grasp of its object is an act of will at the same time, involves as part of its cognitive function, a mode of behavior toward the object. Likewise our feeling states, our emotional attitudes are cognitive ways of dealing with reality, are organs through which reality communicates itself. The real is the experienced; nothing is to us truly, completely real until it is experienced; this experiencing by which reality is made ours and defined is a feeling and a willing no less than a thinking experience. We can define an object or piece of reality, only as we describe the feelings it excites, the actions it is fitting or necessary to perform in its presence; these are a part of its meaning, its very essence or *whatness*. A child's way of defining its unnamed object is nearer the concrete reality than our later names. With us at a later stage of knowledge after we have learned to abstract qualities and relations, and to substitute symbols for concrete reality, a name does service in place of the thing named; and the name need not, rarely does connote more than one or two salient, interesting and for our purpose important items in the thing's reality. The child, innocent of these artifices, defines his object in purely experiential terms. It burns, it is sweet, hot, hard, it hurts, it is good, etc., expressions which describe the child's experiences of things, the way in which it is affected by them, their values for his interests and purposes. His real objects are things which give him certain experiences, predominately feeling and active in their nature. A thing is an occasion on which he has certain impressions and

feelings, and which call for a certain kind of action on his part. This naive view which the child has of reality, reflects the original character of cognitive experience, the interweaving of intellectual feeling and volitional factors in that experience.

The fourth fact in the psychological basis of the pragmatic theory of knowledge is, The social character of experience. Experience is a social tissue, the interwoven threads of which run in unbroken continuity throughout. This experience web is made up of distinguishable portions of experience, each of which possesses a unique character, each is an individual center, out from which various threads of relation run to other like centers. A mode of conscious functioning characterizes each of these centers, which is not repeated elsewhere. Every bit of experience has thus a subjective character, it is owned or appropriated by a subject. A peculiar interest, a feeling of intimacy, attaches to it which we denote by the words, my, mine. An ego-centric character thus belongs to every significant portion of experience. But these individual, personal, centers of experience notwithstanding their subjective, ego-centric character, are not isolated or separated from each other; no one of them functions independently of the others; each transcends and must transcend its mere subjectivity, its ego-centric consciousness; for each one is constituted, has its character determined and subsequently comes to enter consciously into social relations with other individual minds. Historically regarded there has never been such a human ego as Descartes assumed as the starting point for knowledge. No human thinker ever began his career as a solitary being, and afterward set out on a voyage of discovery to find other beings;

a knower so constituted, if indeed he could know anything, would never know other beings than his own poor and meaningless self. Only through his social consciousness does the individual attain self-consciousness; only in relation to his social fellows does his own isolation grow defined. The consequence of this social structure of experience is, that there is no such thing as a cognitive experience, that is merely subjective. In the growth of experience, no individual mind is first formed with a merely self consciousness. This social implication in cognitive experience cannot be denied without the denial of the experience itself. Our knowledge is a social growth; our real world a common world; every object of perception is a social object; it would not be a real object for me, could I not point it out to other minds. Every assertion I make is an appeal to a common mind, as the standard of judgment. The co-presence of other minds is the condition on which I possess my own mind. Thus is the social character of experience the presupposition of any tenable theory of knowledge.

We have seen the psychological foundation on which pragmatic epistemology is based. We will now examine the theory itself. Our first task is to gain a right conception of the function of thought. To do this we must get clearly before us a situation out of which thought arises, in which it can be seen at work. We will call this the thought-knowledge-situation, by which conjunction of terms I mean the specific occasion, the status of experience, out of which the thinking that is to issue in knowledge arises. Our actual knowledge is always particular; there is no knowing in general; knowledge presupposes a particular situation out of which it comes and to which it is relevant.

Thinking as the instrumentality by which knowledge is achieved, has always some definite antecedent, and deals with a specific situation, and for a specific end; thinking is a method of solving a specific problem.

To begin with the thought-knowledge-situation:

The situation out of which thinking comes and which calls for thought is characterized by such facts as the following. There exist between the parts of experience, obstacles to the movement of ideas, puzzle, bewilderment, hindrance to activity, wants which crave satisfaction, impulses with no defined ends. The experience status is, in consequence of these discordant elements in it, problematic; it sets a definite problem; to change this experience, to transform the situation into one which shall be free from discords, perplexity, and dissatisfaction. This is the problem which is set for thought; it is theoretical as well as practical. Such being the situation and its problem, let us follow thought in the solution of this problem.

Its first task is to define clearly the given situation. This it does by analysis and discrimination of all the elements within the situation and by ascertaining their connections; in short this preliminary work of thought is a definition of the presented facts, a clear statement of the problem which they present. Now supposed the situation defined, the problem stated. The next step to be observed in the thinking operation is the forming of an idea or conception of the experiential status, which were it present as the given experience is present, would terminate the discord, the dissatisfaction, etc., in the present situation. This tentative idea is also an idea of what is to be done in the way of operation upon the existing datum, in order to effect the desired

result. The idea is consequently a plan of action; it is something which can institute and guide experiential operations. This idea in some situations is clearly a purpose, an intent, it aims at a kind of experience which, were it present, would be the fulfillment of a purpose. Now it is clear that as the pragmatist conceives the matter, the cognitive idea is representative of experience, of experiential activities and states; it is a substitute for such experiences, functions in their place and in the place of the experiences which are sought as object or goal of the cognitive process and in the place of the intermediary experiential operation by means of which the terminal experiences are reached Now comes the final step in the cognitive process. This consists in an experiential operation or process of the following sort: Under the guidance of the tentative idea as a plan of action, there follow certain actions and experience processes, which lead to and terminate in the experience which harmonizes the discrepancies, clears up the perplexities, satifies the want and relieves the tension; and ends the dissatisfaction which characterized the original situation. This fulfilling and satisfying experience in its connection with all that has lead to it, is when retrospectively viewed, knowledge. For looking back and taking the experience states, ideas and actions and their immediate consequences, we can say each of them was cognitive in its meaning and aim; and their realized meaning, their successful aim is what constitutes knowledge. Here is the step from idea to knowledge. This terminal experience is first present in idea, is the idea's meaning, its intent and aim. By the operation of that idea in the control and guidance of action, this experience becomes actual; the idea has made good, it has

become successful, and this its proved value is what we shall later see is the meaning of that much discussed term truth.

It will make this meaning of cognitive experience more intelligible if we study one or two concrete cases. The first shall be the case of a man who has lost his way in a forest, is exhausted by his fruitless wanderings, is without food and shelter, exposed to the perils of wild animals. These facts constitute the situation, which sets the problem of knowledge. In this instance the problem is altogether practical; it is to get out of the woods to a place of safety, where the man can get shelter and food. The solution of this man's problem of knowledge is accomplished in the following way:

(1) The man's thinking defines clearly his situation, all the elements which constitute it, all that is relevant to what the situation calls for.

(2) The man forms a tentative idea which in this case is essentially a plan of action; this idea contains every operation by means of which he seeks to realize his practical aim; every item of experience which is relevant to the actions he is to perform enters into this idea. This idea includes also whatever feature or fact of his environment he needs to take account of in working out his problem, obstacles to be overcome, things which can further his plan, all these things form a part of his real world at the time.

(3) The man working upon this idea, being guided in his various actions by it, finally reaches the place of safety, shelter and supply of his needs. This is the terminal experience, at the beginning was present in idea, is now actual and is, when viewed in relation to the experiences that have led to it, knowledge.

The next case shall be a situation which presents a distinctly theoretical problem. Let it be the case of an astronomer, who notes in the movements of a known planet, certain irregularities, the cause of which he has not yet ascertained. The thought knowledge situation in this instance, contains discrepancies between actual and predicted events, discontinuity in place of continuity, dissatisfaction arising from baffled endeavors, and unrelieved preplexity. The specific problem which the situation sets is, to get an experience in which this disturbing discrepancy is removed; the idea which thought constructs, we will suppose is that of a planetary body of a definite mass and position in the solar system. This idea is then acted upon; it instigates and directs a course of experiential operations—say, observing with telescope, measuring, computing, comparing computed with observed facts, etc.—with the final result that this object fits into the context of experience, so as to remove all discrepancies, and fill the gap, in continuity; in short make this frustration of effort, and this unpleasant break in the continuity of events shall be removed. The tentative idea makes the whole experience situation harmonious, coherent and satisfying. Here again knowledge is seen to be the final result of an experience process, having two termini and an intervening or intermediary experiential operation, which finally links these two termini or portions of experience. We see that the function of thought is to effect this final connection between these portions of experience, or to effect the transition from the experience-portion we call the situation-for-thought, the terminus *a quo* situation, to the experience portion which, completes the meaning, removes the discords, and the dis-

satisfactions which characterized the initial experience. When this has been done, the thought-knowledge situation is worked out, the problem of knowledge is solved.

THE PRAGMATIC MEANING OF TRUTH

We have seen that the function of an idea is to institute and direct various actions and their accompaniments so as to secure a desirable reconstruction of experience. Thus, in the case of the man lost in the forest, the idea guided his actions, directed his perception and inferences to the desired end. Now this successful dischage of its function, this efficiency and good working of an idea, is what pragmatists mean by the truth of an idea. A true idea is one which works well, in the sense that consequences which follow from its adoption, are in the widest sense of the term desirable consequences, theoretically satisfying as well as practically satisfactory. To work well in experience and to be true, are two expressions for the same fact. These good consequences of an idea are also the criterion of its truth, they are its verification; not however in the sense that they merely prove that the idea was true, they are the trueness of the idea itself. Since they constitute the truth of the idea, they of course verify the idea in the sense of proving it true. Our man in the forest after he had found his way out, and sitting down in security and comfort, and recalling the way in which he had w rked himself out of the undesirable situation into the present satisfying one, if he was a pragmatist, he did not say, "The idea I formed and adopted as a plan of action, was a true idea the minute I formed it, and my subsequent working upon it, and the resulting experiences have proved that it then was a true idea,

in other words verified my idea. I did not make its truth, I only became certain of its truth, its being true and my knowledge of its being true are two distinct things, the truth of my idea is one thing, the verification of this idea is quite a different thing." Now, this is just the way a realistic rationalist or an intellectualist would view the matter; and were our traveller a thinker of this type, this would be his reasoning. But our pragmatist would reason after this manner, "My idea which I tentatively adopted as a plan of action, was successful in guiding the course of experience to this satisfying issue; and this successful working of my idea is what I mean by its being true. My idea was not true to begin with; it became true, it was made true, it made good by its working; and this, its making good and being true are two expressions of the same fact. In a sense I could say that inasmuch as it was the kind of idea that was fitted to lead to these good consequences, it was potentially true the moment I formed it; just as I say this cheque I have in my pocket, is potentially good; it will bring cash at the bank, its cash value is its actual goodness. So with my idea, it was practically good and could be cashed in terms of actual experience, but it was actually good or true only as it did get reduced to concrete experience. Or, to put the matter in a different way, my idea had a claim to being true, when I entertained it in the forest. This claim was subsequently made good."

The pragmatist's proposition that true ideas are those which are satisfying, those which have satisfactory consequences, has exposed his doctrine to misunderstanding. He is supposed to mean that any idea is true the entertainment of which by the mind, affords satisfaction or

makes one feel well. He is supposed to identify truth with satisfaction, as a good state of feeling, pleasure, hope, etc. According to this interpretation our lost traveller's idea of getting out of the forest, etc., was true when he formed it, provided it gave him satisfaction in cherishing it; if it made him happy, hopeful, etc.

Now, the pragmatist does not mean that the satisfaction of this sort, felt in entertaining an idea makes the idea true, or affords evidence of its truth. The satisfying consequences he means are those which follow the adoption of the idea, and the acting upon this idea. They are the whole course of subsequent experience, and they include objective things as well as subjective conditions, theoretic consequences and theoretic satisfactions as well as practically satisfying consequences.

Before passing to the next part of the pragmatist's doctrine, a word should be added to what has been said upon the distinction between truth and verification. For the pragmatist, the truth of an idea and the verification of an idea do not connote different things, but distinguishable aspects of the same thing. Thus to recur to our lost traveller: Keeping his hypothetical idea like a map in his hand, and comparing with the idea his actual experiences as they successively came to him, he could say he was verifying his idea; but he would also say the same experiences into which the idea was leading, were what he meant by the truth of the idea. So that the truth of his idea consisted in its verification. Its verification was inseparable from its being true. The pragmatist's distinction between truth and verification is identical with the distinction between potential truth and actual truth. Verification is the passing

from the potential to the acutal truth of an idea; it is getting the idea cashed in terms of concrete experience.

THE PRAGMATIC MEANING OF REALITY OR THE OBJECT IN KNOWLEDGE

The pragmatist meaning of reality has been the occasion of scarcely less misunderstanding and dispute than his meaning of truth. The pragmatist has no hesitancy in accepting the following propositions: Our thinking deals with reality; our ideas are true or false according to the way in which they deal with reality. It is by reality that we judge of the success or failure or our cognitive endeavors. But, by the term reality, the pragmatist does not mean something which is independent or separable from experience. Reality is *intra-* not *extra*-experiential. The stuff of which reality is made so far as we have to do with reality in cognitive experience is the stuff of which experience is made. The predicate term real does not connote something that is non- or trans-experiential, but a character of experience, or some particular portion of experience or its contents. We say of a certain experience, it is real just as we say that it is interesting or dull. To recur to the exposition of the thought-knowledge-situation. The thought situation is *de facto* real; discordant experiences, obstacles to activity, perplexity in thinking, etc., these are facts, they constitute our reality then and there. Reality is something which must be taken account of, with which we have to reckon. But none of these presented facts are extra-experiential. They are experience facts. Their realness is the relation they sustain to our purposes, our aims, our wants, etc. Now our thinking as we have seen, sets out from this kind of reality, as

its datum or *terminus a quo*, and it leads through various intermediaries as it may be, into another reality, a reality of a different character. It is a reality which means a removal of discrepancies, of want, etc. When these two portions of experience are brought together, or rather when an experience status has been brought about in which both the experience portions are united, we have the object, the reality aimed at. Now in the cognitive operation there is no transcendence of experience, *qua* experience, but there is brought about an altered, improved and more satisfying kind of experience. And this leads to another feature of the pragmatist conception of reality. Realities are not static, unchangeable things, the real world is not unchangeable, not incapable of being made better or worse, is not completed, there can be more of it. Our realities can be made over, made better and more satisfying. Some of them at least can be remolded closer to the heart's desire; none of them remain what they were after we have worked upon them. It is the function of our thinking, it is the meaning of our cognitive endeavor, to reconstruct a reality which is unsatisfying for various reasons and to put in the place of it another reality which is satisfying to all our interests.

If there be reality which is already complete, unchangeable, etc., it lies outside the field of our experience; and our purposes and interests can take no account of it. But within the field of experience, the only reality that is unchanged, is that which we have had no occasion to change in the interests of our purposes. If there is destined to be for our recognition, an Absolute, and therefore unchangeable reality, it must be a form of experience which no one could

desire to change, and could have no motive to change. In that experience there can be no unsatisfied want, no unfulfilled intent, no unrealized purpose, no incomplete fragment of meaning.

Such is the Absolute. That there is such a reality, the pragmatist is as free to postulate, as the rationalist: his position is that with a reality of this sort, we do not sustain properly cognitive relations. The reality we know is susceptible of change and improvement by our cognitive working; it is just our function as thinkers and knowers to add something to reality, to improve it and bring it closer to our ideal. All our thinking and knowing goes on the assumption that our real world is still in the making; and that our individual endeavors count toward the achievement of a better kind of reality than we yet possess. Completed, perfected, and therefore immutable reality, is for a thinker, a knower, who is already all he can be and can aspire to be and who has nothing left but to enjoy a static and absolute perfection.

OBJECTIONS TO THE PRAGMATIC THEORY OF KNOWLEDGE

A theory which differs so radically from orthodox rationalism has naturally called forth vigorous criticism. And since it will conduce further to a clearer understanding of pragmatism I will now discuss some of these objections.

The first objection is: In its attempt to unite the ruling conceptions and methods of psychology and logic, this theory has simply confused them with the consequence that its own method is neither intelligible as logic nor as psychology. The objector insists that psychology and logic each deal

with knowledge in ways which are too diverse to admit of the kind of connection pragmatism tries to maintain between them.

A still more serious result of this oversight of essential differences between the methods of psychology and of logic is a misapprehension of the nature of thought. The objector says, "I have no difficulty in regarding thinking in one of its aspects as a process in experience. Psychologically viewed, thinking as every other conscious functioning is an experience process, like every other psychical process; it arises under definite conditions, goes on in a describable manner, and terminates in other psychical processes or states; but when I am asked to see in this mode of experience, the logical structure, the epistemological significance of thought, I confess I am totally unable to do this." "An experience process as such and its logical and epistemological value are, I am constrained to think, different things. Experience may be the only field in which we do think and in which our thinking can be valid, but it remains true that in that field thinking has a character which the pragmatic theory fails to recognize."

To this objection, the pragmatist answers, "Your objection is an instance of what may be called the intellectualist's fallacy, namely, taking a distinction which formal thinking makes, for a real difference in the matters thought about. Your difficulty arises from a vicious abstractionism; this wrong use abstraction leads you to take a part or aspect for the whole, or rather to take an aspect of experience to be something which is itself other than experience. Because intellect or logical thinking is distinguishable from other processes in experience, you think

it is different from experience itself. Your whole objection is based on the assumption that where our abstract thinking makes a distinction, there must be a real difference in the matters themselves."

But the objector presses his attack at another, and seemingly more vulnerable point and says, "The reasoning by which you maintain your doctrine of truth moves in a circle, for your doctrine asserts that the successful and satisfactory working of an idea and the truth of this idea are the same thing. Now, you must give some reason for the fact that an idea *is* successful, *does* work well in experience, while answer another idea fails to work well. You are bound to answer the question, why does a given idea work well in experience? It is certainly no answer to this question, merely to point to the successful working of the idea, any more than it is a fitting answer to the question, why is A a successful man, merely to point to his actual success."

"Now, examination shows that the reason why an idea does work well in experience is something quite different from the merely good working itself, just as the reason why a knife cuts well is distinct from its mere cutting well. Now, this reason must be found in the idea, *qua* idea, in its relation to something which is other than the consequences which result from that relation. Now it is just this relation between the true idea and fact or reality which your theory overlooks. The consequence of this oversight is that, when your try to give a reason why an idea works well, you can do so only in appearance; for you are compelled to say an idea is true because it works well, and it works well because it is true."

The pragmatist meets this objection in the following way:

"Just *why* a given idea does work well, and is therefore true I do not profess to know any more than I claim to know why our world of experience is what it is. Doubtless an all knower could answer this question. It certainly is no answer to this question to say, as you do, it is because the ideas agree with something, called reality, real world, etc.; for that is as much an enigma as the fact you ask me to explain. A true idea does have its own distinctive character, in virtue of which it works well, but why it has this character, how it came by it, I do not pretend to know. Nor does it seem to me that you really answer this question, by appealing to reality or a real world; and to this ineffable relation of the idea to it, called agreement, correspondence, etc. Unless you already know what this real world is, agreement with which makes the idea true, I must think your reason is but an instance of explaining the unknown by the equally unknown. The difference between us at this point is this, I frankly confess I cannot answer the question, why a given idea works well and is therefore true. You answer this question by appealing to a sort of a relation between the idea and reality, the very nature of which is still problematic."

But the objector makes a third attack upon this doctrine. It is to this effect: "If you are consistent as a pragmatist, you ought to be a most solitary being; nay, you are a solipsist. Yourself, your subjective experiences are your only real world; for you can think of and know only that experience which is your own; no other experience is fact for you but that of which you can say, my experience. Your individual experience is the only experience you are entitled to recognize. If you set up the fiction of other minds, as you

doubtless can do, it is to play with them as dummies in a game of solitaire. You cannot logically convince yourself that the other minds are other than bits of your own experience, any more than the player of solitaire can delude himself into the belief that his dummy is a real human player. No, if you will be a consistent pragmatist in your epistemology, you must be a solipsist in your metaphysics." To this objection which by some is held to be unanswerable, the pragmatist can make the following reply: "The psychological basis of pragmatism which no rejecter of this theory has yet overthrown, distinctly shows that our human experience is social in its very structure. Consequently such an individual as your solipsist cannot exist; and, therefore, I am absolved from the task of saving my theory from solipsism. But, were such a predicament conceivable and the logical consequence of my theory, can you who adhere to an intellectualistic logic save yourself from the same fate? Pray how do you rationally know that you are not alone? How do you by your method of knowing, reach the existence of other beings than yourself? Can you save yourself from logical solipsism in any other way than by the pragmatic method of salvation from doubt? It is just because experience with one solitary individual in it, would be an intolerable situation, and must therefore be worked over and transformed into a social experience, that no individual who is a pragmatist could remain a solitary being, did he find himself in such a predicament."

"So far then from its being true that pragmatism is logically solipsism, pragmatism affords the only logical escape from solipsism."

But, pragmatism encounters another objection to this

effect: According to this theory, the same idea can be true and false at the same time, true for one mind and false for another. For, if it be that of an individual only, then the same idea may work well in the one individual's experience, and fail to work well in the experience of another individual. Thus, the idea of there being intelligent being on the planet Mars, works well in A's experience, while the same idea does not work well in B's experience. Consequently the same idea would be both true and false This objection is met by calling attention to the fact that the verifying experience is not that of an individual merely, but of all individuals, or experience in general. An idea in order to be true must work well throughout experience; and it is not completely true until it has done so. But the objection is pushed farther, and the objector now says, "The same idea, since it is not wholly true for one individual and not wholly untrue for another, is in part true and in part not true for all individuals. The same idea would then be a mixture of both characters, true and false." But the pragmatist sees nothing serious in this objection. He readily admits this mixed character of an idea, its character of being only partially true. That only means that an idea can be more or less true, or that truth has degrees. For, since an idea acquires its truth or untruth according to its working in experience, it becomes true so far as it works well, and fails of that character so far as it fails to work well. Indeed, the pragmatist can maintain that the admission of degrees of truth occasions no more difficulty on his theory than on the theory of rationalism.

One more objection to pragmatic epistemology remains, and in the judgment of many antipragmatists, this objec-

tion is valid and most serious. "Pragmatism," says the objecter, "leaves the ethical and religious demands unsatisfied. It does so because with the most favorable interpretation, experience is purely humanistic; the theory can recognize only our human experience. The only world which the pragmatist can admit is the world of our human lives. There is for the consistent pragmatist no trans-human reality. Whatever ideals, whatever aspirations, whatever dissatisfactions exist in our experience, the only fulfilling and satisfying reality there is to which we may look, is made of the stuff of these same human experiences. We are not permitted to look beyond our human type of reality. For the satisfaction of our ethical and religious needs, and ideals, we must look to our possibly better selves. Our idealized selves are our Gods. In answer to our cry after the divine, the All Good, there can only be given that fragment of truth and goodness which our human finite selves can possess."

To this objection the pragmatist can make this answer: My doctrine does not limit experience to our own human type. I set no bonds to possible experience. Why may not the social experience embrace the supra-human, the Divine as well as the other human minds? True, there is a closeness and intimacy of connection between our human minds that we have not yet realized between ourselves and the greater than human experience. I acknowledge, realize, and communicate with my human fellows, as I do not acknowledge and communicate with any other parts of experience. The experience portions which mean other minds like my own, and things not minds (possibly), get linked to my individual mind, become interwoven with

the very experience I call mine; because I am constantly engaged in solving various problems which arise in my experience, and for the solution of which I am constantly sent, as it were, to these other minds. It is otherwise with that vast outlying tract of experience. How much of it is destined to become cognitively connected with my individual being as these nearer experience centers are connected, no one can say; but up to date that whole region is hardly more than postulated reality. Now, in this outlying region of transhuman experience, we put the Divine, the All Good Being, just as in idea we represent a finite and human experience. The difference, however, is this. The divine reality remains still a postulated experience, we have not yet verified its existence, or, rather, our idea of it by the experiential connections, through which in the case of other finite portions of experience, we verify our ideas. Has not, therefore, the pragmatist the same right to postulate God as his rationalistic objector? Nay, is it not the pragmatic method we all adopt when in our dissatisfaction with the experience reality we call the finite universe, and our human existence, we seek a form of experience which were it present and really ours as this fragmentary, discordant, and unsatisfying reality is present, would solve our problem, fulfill our still unrealized purposes, and satisfy our still unsatisfied cravings and minds? Or, why should not a pragmatist of all men if he finds our human experience in its totality unsatisfactory and in need of reconstruction, not set about that task of gaining this satisfying form of experience, in the same way in which he proceeds with any particular finite piece of experience, and consequently frame the tentative idea of a reality he calls God. True, he must wait for the verifica-

tion of this idea; perhaps that verification will never come. But, is the case otherwise with the rationalist? Does he yet know that the God of his idea exists? Has he verified his postulated, his hypothetical God-idea? Therefore, I conclude, the pragmatist need not be without God in his world. Pragmatism does not leave the ethical and religious demands of our nature unsatisfied."

I have presented the epistemology of pragmatism and the pragmatist's defense of his doctrine. A comparison of this theory with the theory of empiricism shows a very close relation existing between them. One might almost be justified in saying the pragmatic theory of knowledge is empiricism, only of a more radical sort than the older empirical theory. But more careful examination discloses not unimportant differences between the epistemologies and in the conceptions of experiences. In the empiricism of Locke, Hume and their followers, experience is merely the passive reception of impressions of sense. These original impressions passively received, are copied, reproduced in ideas, which of course imply action of mind. Other mental activities are recognized in discrimination, abstract thinking, etc., but just how these active functions are related to experience as the empiricist conceives it, is not clear. The tendency of this general theory is to regard the whole process of ideation and knowing as passive rather than active. Thinking, knowing are not constructive, or reconstructive activities; they are simply reproduction or representation of reality already made and determined in all its important features, without the coopeartion of our thinking and cognitive activity. Now, quite in contrast with this conception of experience and its relation to knowledge,

pragmatism makes experience fundamentally active and coextensive with all our modes of action. Experience is experiment, tentative activity, directed to something. What is passive in it is only the occasion, the datum for action, which seeks always to change, reconstruct— this merely given. Experience is experiencing, and that means experimenting; and into this experimental process, there enter as cooperant factors, all our functions, perception, thinking, feeling, willing. There is no such experience as passive reception of impressions. Our very reception is reactive; the nearest approach then to passivity, in mental attitude is the simpler feeling states, pleasure and pain. Experience being thus through and through activity, perception, memory, imagination, thinking, and willing, can be properly characterized as definite modes of experiencing.

The entire web or context of experience, woven as it is by these activities and states, and always in process of change or reconstruction, is the reality with which as individuals we have to do. Now this conception of experience carries with it a second feature of pragmatic epistemology, in which its difference from empiricism is important, the conception of knowledge. Empiricism is intellectualistic in its idea of knowledge. It is in accord with rationalism on this point, that the function of the intellect is to know. So also in its conception of truth. With rationalism it holds the intellectualistic doctrine that truth is agreement or correspondence between idea and reality which the idea does not determine, and consequently knowing does consist in having consciously true ideas of fact. Furthermore, the empiricist's ideal of truth and knowledge is a known agreement between our ideals and a real world which is distinct from our

experiences of it, and which possesses a structure that we in no manner constitute or change, by our knowing. The empiricists of the older type always judged our actual, our attainable knowledge, by this ideal of knowledge, and hence the doctrine that our knowledge is limited and is imperfect. Hence, our beliefs, the truth of which we can never know. Empiricism in rejecting the claim of rationalism to a knowledge of trans-experience reality, did not abandon the thought of that reality and it continued to make that reality the standard real, and a knowledge of it the ideally true knowledge. Hume's scepticism owes its whole force to this conception of reality and knowledge, which is in the background of the empirical theory. Now we have only to recall the pragmatic doctrine to see that it diverges from empiricism widely on this important point. But this point can best be discussed under the topic with which I shall conclude this second part of our study. This topic is Scepticism, Doubt.

We have first to ascertain the meaning of this mental state; for scepticism, doubt, whatever be the proper signification of these terms, designate a mental attitude toward knowledge and truth, or to a claim which is made to them. It is well to begin with the observation that scepticism does not mean denial. So far as one denies, he does not doubt. On the contrary he asserts knowledge. If I deny there are intelligent beings on the planet Mars, I at the same time assert a knowledge of conditions on that planet which exclude the existence of such beings there. If I deny any knowledge about the planet Mars, I assert a knowledge about my own mental condition or my cognitive status. I assert it is one which excludes knowledge. The essence of scepticism,

doubt, is the consciousness, the confession of ignorance. It follows from this meaning of scepticism, that it cannot be absolute. I may assert complete ignorance of the conditions which obtain on the planet Mars, but I at least know or claim to know that there is such a planetary body as Mars which does have psychical conditions of some sort. I may assert complete uncertainty as to the existence of such a planet as Mars, but to do so I must know or claim to know something about the solar system within which I place this problematic being.

We must next ask how doubt is possible? We have seen that doubt is a mental attitude toward something which is conceived or suggested as real or true. If I doubt, my doubt has its object, I doubt about something. I can be ignorant only in relation to a conceived state of mind, which were it mine would be knowledge. Something, therefore, which I lack, and the confession of this lack of a certain ideal state I call knowledge, is what I mean by my ignorance or doubt. It follows from the necessary presupposition of doubt, that both the nature and the significance of doubt are determined by the conception we have of knowledge, and of truth. Hence, the meaning and the importance of scepticism is not the same in the epistemology of rationalism, especially realistic rationalism, as it is in the epistemology of pragmatism. In the doctrine of realistic rationalism, the possibility of doubt cannot be excluded, for since our thought deals with a reality whose nature is already determined, and its determinate nature is wholly independent of our thought, the truth of my thought must consist simply in correspondence, agreement with this reality. Now, unless thought by its own structure or by its

own operation somehow affords indubitable evidence of its truth, that evidence must come *ab extra*. The only other sort of evidence must be empirical verification. Now, verification based on experience can never carry us farther than the knowledge of complete agreement between facts deduced from the hypothetical reality, and the facts of observation and experience; but this does not exclude the possibility that the reality might be other than it is conceived, and yet the same verification be possible. It will always remain possible to conceive reality otherwise, or that reality is other in its own nature than we have thought it; hence doubt will always be possible, and what is more serious, it will be possible that our thought is completely wrong, while of course, there may be degrees of truth, the doubt is possible that in a given case, our thought has the maximum degree of untruth. It does not comfort me to be told that my idea of God may be in part true, so long as I cannot be certain whether it is only in part true or altogether untrue.

If we turn to pragmatism it would seem at first sight that doubt has a very different significance and that it can be overcome. It might seem that pragmatism offers a full salvation from philosophic doubt. Let us see if this first impression is borne out by more critical examination. According to this theory ideas are true in varying degrees; an idea is true if it works well, if it guides experience to a successful and satisfying result; an idea is consequently true in the measure in which its working is good and satisfying. So far as it works well it is true, so far as it fails to do so it lacks truth. Now, so far as an idea is true, there must be knowledge of this truth; for this working well is a matter of

experiential knowledge. An idea which should work well throughout experience, work altogether well and bring completely satisfying consequences, in other words be completely verified, would be completely true, for the truth of an idea and its verification are the same thing. And hence the absolute banishment of doubt is theoretically possible. On the contrary, in realistic rationalism, theoretic doubt must always remain; there is no salvation from it. If I accept pragmatism, I ought never to suffer more than a partial doubt, if in fact so much as that, for my idea being true so far as it works well, and I knowing whether or not it does work well, cannot be in doubt. And since an idea acquires the character of truth or untruth only in consequence of its working, and so far as it actually does work, it would seem that so far as this idea becomes true, it is known to be true. So that there is no room for doubt; it cannot enter at any point in the career of this idea. But is there no point at which doubt can enter into a good pragmatist's mind? Is the pragmatist never uncertain? Is there nothing about which he is doubtful? One thing is clear, the pragmatist cannot be uncertain about the same matter as the intellectualists; nor is he uncertain for the same reason. Of what then can the pragmatist be uncertain? Concerning what can he be in a doubtful state of mind? In answer, I will suggest that doubt may enter for the pragmatist at two points; first, at the beginning of the process of verification. To recur to our man in the woods, after he had formed his idea of his course of action, and of experience which would bring the desired experience, and before actual working upon this idea, and getting knowledge of the idea's good working, and consequently of its truth, the man was, we

will suppose, uncertain whether or not this idea would work well. I am supposing that the only experiential working that is to be taken into account, is this individual's experience, and hence the only open question was, will the idea work well in my experience? The only possible uncertainty would relate to this possible future working of his idea. Now, observe that this doubt is not a discouragement to action, on the contrary, it is a stimulus to action. For the man can banish his own doubt, he can know the truth, and he can reach a point beyond possible doubt. Now, let us note the second point at which doubt can enter the mind of a pragmatist; and we may be disposed to think this doubt if genuine is as bad as the intellectualist's doubt. This other opening for doubt is the verifying process. In what experience must an idea work well, if it is a true idea? In the experience of the individual merely, or in experience *ueberhaupt* or universal experience? If in the latter then how is the individual to know whether or not his idea is one which does work in experience of all minds, and not merely in his experience? How can he know whether the idea which works well in his experience works well in the experience of all other minds? Can he assume that there is a common content of experience or character of experience, so that when he finds an idea works well in his experience, he can be certain that it does work, or would work in the same way in all those other portions of experience? Unless he knows this fact, must he not have to wait until experience in general is known to him or is complete before his uncertainty passes into knowledge? If so, in what respect does his situation differ from the intellectualists whose doubt as we saw, can never be extinguished? Could our intellec-

tualist doubter become all knowing, his doubt, of course, would vanish. Could our pragmatist get all experience under his view, know it all, his uncertainty would likewise pass away; but both being finite, must they not both remain in doubt? But, it may be answered, the doubt does not have the same significance in both cases. The intellectualist's doubt could continue were verification complete, while complete verification in the case of the pragmatist's doubt would mean its extinction. But after all, has this difference anything more than a theoretic importance? Practically, do not both tread a minimum doubt in the same way, namely, regard it as a negligible quantity, and cease to be affected by it? Under the intellectualist's view of truth, a completely verified hypothesis has the working value in a certified truth.

PART III

THE PROBLEM OF CONDUCT

CHAPTER VIII

THE PHILOSOPHY OF CONDUCT

The matters we shall be occupied with in this part of our study form the subject of what are commonly called the philosophical sciences, ethics, æsthetics, and religion. The peculiarity of these sciences is, that the judgments which form their content are not only judgments of fact but judgments of value. In ethics, æsthetics, and religion we have to do with appreciations, and not with descriptions merely, with values and not with facts merely, with questions of what *ought* to be, and not merely with what is, with such hings as standards and ideals. The objects which form the subject matter of these sciences are presented to us in two ways; They are facts to be described, explained as science explains all its facts. They are also objects which have value, they are to be appreciated, valued. In ethics, æsthetics, and religion we enter a world of appreciation, something which is quite other than the world of description. In these subjects we have to do with both worlds; for example, a human action, in one aspect of it, in one part of its reality, belongs to the world of description as truly as does a body moving in space; it is something to be explained, just as science explains any phenomenon. Both the external

observable deed, and the internal mental antecedents and motives to the deed admit of a natural science explanation. But this same action has another character, there is another part of the total fact, which cannot be disposed of by a scientific explanation; the action and its motivating antecedents are *valued*, in such terms as right or wrong, good or bad. This value judgment is altogether distinct from the fact-judgment, the *meaning* of this action is a problem that is quite other than the problem of its existence as a phenomenal event. This value judgment, this meaning of the action, calls for an explanation which has no recognition or relevancy in the field of science. The same thing is true of the aesthetic judgment; aesthetic valuation, like ethical valuation, is something over and above the factual existence of the thing which is aesthetically appreciated or valued. No scientific explanation of a rose will explain or justify the judgment, the rose is a thing of beauty. What is true of ethical and aesthetic valuation, is true also of religious beliefs, emotions, and actions. Religion is one of the ways in which we respond to, react toward our larger environment. This religious reaction embodies itself in form of beliefs, emotions, hopes, fears and various will attitudes. Religion is a form of appreciation, a way of valuing the world-reality in its relation to our lives. Religious belief is an expression of the value which its object possesses for the believer.

It is customary to distinguish logic, ethics, and æsthetics as normative sciences, because a norm, or standard, in accordance with which the judgment is made, is presupposed in their judgments. The judgment that an action is right or good, that a flower is beautiful, presupposes a

standard, an ideal or norm of rightness, and beauty. The normative character of the science of religion is not obvious; but reflection discloses this normative significance of religion; for we have seen, we have to do with valuation in religion as in ethics and æsthetics; and it is one of the aims of the science of religion to ascertain those forms of belief, those emotions and actions, which are adapted to secure this religious valuation.

We have accepted the designation, philosophical sciences; but it would be better to discard this term; its use tends to break down the distinction between science and philosophy, which is no less clear in this field than it is elsewhere. It is true that in this department of our experience, the residual problems which are left when science has done her work are problems of greater interest and importance for us, than are the problems which belong to science in other spheres. But the demarcation of philosophy from science is no less to be maintained in this field, than in the other fields of our human experience. Ethics and æsthetics are no more philosophical sciences than are physics and chemistry.

I. THE PROBLEM OF MORALITY

Of the three problems which fall to this main division of our study, we shall deal with two only, the problem of morality and the problem of religion. We take them in this order, and we first note that the main problem of the moral life breaks up into three special problems as follows:

1. The relation of morality to metaphysics, or the Metaphysical Implications of Ethics.

2. The Problem of Free-will.

3. The Problem of the Good, or the Ethical End.

Ethics and Metaphysics.

In answer to the question concerning the relation between morality and metaphysics we meet two opposed views; One view is that a positive and vital connection exists between one's moral life and one's conception of the nature of reality, or one's world-view. The opposite view is, that morality is independent of any conception one may have of ultimate being. Between a man's ethical belief and his world-view there is no relation of any importance. The upholder of the first view maintains, that the connection between our ethical judgments and ideals, and our conception of the real-world of fundamental being, is one of mutual dependence. Our ethical valuations, our ethical standards and ideals, are, in a serious manner, affected by the world-view we hold. The valuation we give to our existence, the consciousness of duty, the recognition of responsibility, and our moral faiths, are in no slight measure determined by what we think of the world reality of which we are apart, of its character and relation to the interests and aims of our ethical life. On the other hand, what we think of the world reality, our conception of fundamental being, is determined by our ethical valuations and ideals. We are impelled to conceive the basal reality of the world in a way which will satisfy the demands of our moral life. Morality is our supreme interest, we cannot rationally believe the nature of things is hostile or indifferent to these supreme values. It cannot be a matter of no concern to our moral life, whether the larger, the inclusive reality recognizes and supports our ethical valuations and ideals, or is indifferent, nay perhaps hostile to our

ethical endeavor. It surely cannot be a matter of no importance to us, whether in our moral tasks and struggles we believe that a power not ourselves, which makes for righteousness, is with us, or whether we are aliens in a world that knows us not.

For the authority of duty, for the justification of our devotion to moral ideals, we must look to a larger, a higher reality than our human selves. The moral order we did not make, it is something not ourselves, and without the recognition of it duty loses its authority and its support. In short, in our morality, we do not make the moral order to which we conform, any more than our science creates, instead of discovers, the order of nature. The order of nature makes our science possible; the moral order makes our morality possible. A moral universe is the postulate of our moral life.

The opposing view maintains, that ethical values are created by our actions, and are attached to those actions and to their motives. Ethical values and ideals belong to our human world, and they are not affected by any conceptions we may form of the non-human part of the universe. The ways of the cosmos do not concern us in moral action. Whether the non-human world is for us, against us, or indifferent to us, has no significance for morality. Morality is a human production; we do not ascertain what is morally good by first ascertaining or presupposing the goodness of something not ourselves; were it necessary to know the nature, the character of the world-being, we should never know what is morally good. It is only after we have come to know what is good that we come to evaluate the universe at large, if we do so at all;

and what we find to be ethically good is so, because it affects in a certain way the interests, the welfare of human beings.

No metaphysical belief can affect this valuation of our human conduct. Suppose a man is a materialist, he is not logically bound to deny ethical values, the validity of moral judgments, the authority of duty, etc. The only change the acceptance of materialism need make in his view of our human life is in the matter of the duration of personal existence. Materialism *does* involve the transitory existence of the individual bearers of the moral life; but this shortened duration of personal existence does not necessarily affect the significance, the importance, of morality. Nor does the opposite world-view, idealism, give to our ethical judgments and valuations a greater interest for our lives. I am not at all dependent upon the absolute for the significance and value of my ethical consciousness. I am not more ethical, because I believe in a divine, trans- or superhuman reality than I would be did I believe that the non-human part of the universe is a most undivine sort of reality.

Nor are the motives to morality, the sanctions of duty, in any way affected by one's metaphysics. Because I am a materialist, it does not follow that I should lead an immoral life. The fact that I accept absolute idealism does not constitute a reason for doing right instead of wrong in my conduct toward my human fellows. If I confess total ignorance concerning Ultimate Being, I do not thereby absolve myself from moral obligation. Whatever makes our actions ethically good, is the sole reason we should give for performing those actions; the only ethical motive to their performance. If there is no God who takes note of my deeds and discerns my secret thoughts, and who may

reward or punish me according as my deeds are good or evil, have I less reason for doing good and avoiding evil than I would have, did I believe there is such a Being? Or, have I less reason for doing good to my human fellows while I live, if I accept the world-view which has no place for the immortality of the individual? Is it not a purer ethical motive, to desire to live in the lives of others, made better by our influence, than to desire continued personal existence?

We will leave this first special problem with the suggestion that the bearing of one's world-view upon his solution of the problem of conduct is an open question. Let us proceed to the second of the special problems in ethics.

The Problem of Free-will

It may be doubted that there is any question in philosophy which, despite all the discussion and controversy to which it has given rise, remains in so unsatisfactory a condition as this question relating to our freedom in moral action. The issue itself between philosophers who maintain what they conceive to be free-will, and those who deny what they understand free-will to mean, is by no means clear. The term freedom has different meanings; the following are some of them:

(1) The absence of external restraint or compulsion, the ability of a person to do what he wills to do; to act out his own nature.

(2) The ability to act from rational motives, instead of impulses, appetites, or passions. To determine one's conduct by reason, by conscience. Freedom is ability to do one's duty, to determine one's conduct by moral law;

"When duty whispers low 'Thou must!' the youth replies 'I can!' "

(3) Freedom means the ability to act otherwise, or to have acted otherwise, in a given situation, than one did act or is acting in that situation. Now, those who reject free will accept the third meaning of that term; and they oppose to this conception of the will the conception of determinism, the essential meaning of which is, that human actions are so related to certain antecedent conditions that, given those conditions, this particular action and no other action invariably follows. In short, human actions follow from their antecedent conditions with the same undeviating regularity as events in nature follow from definite antecedents. We say of a physical event, given as known the sum total of all the conditions in which it occurs, that event and no other was certain to occur, and could have been predicted. We can likewise say of a human action given as known the character of the actor, and the circumstances in which he acts, his deed is certain and as predictable as a physical event. Whoever should know the antecedent and contemporaneous conditions in which a choice, a decision, is made, could as infallibly predict that choice as the astronomer predicts an eclipse of the moon at a given time. The only reason why human actions are incalculable and seem to be contingent, is that, owing to the complexity of their determining conditions, no human intelligence can embrace them all, or even more than a small part of these influential circumstances.

Now, in opposition to this doctrine, the upholder of free-will must maintain the contingent character of human actions. He must assert that a choice, a decision, is not determined,

its occurrence not certain, *until* it has been made certain. Prior to this particular choice or action there was nothing which determined that this and not that choice should be made, and consequently, even supposing a perfect knowledge of these antecedent and contemporaneous conditions, this choice could not be known in advance of its becoming fact.

The only significant issue between free-will and determinism turns on this question, are human actions contingent events? The free-willist answers this question in the affirmative, the determinist must answer it in the negative. Inasmuch as a contingent event is an *un*-determined event, this issue may be stated in terms of determinism and indeterminism. The term indeterminism is preferable to free-will, since it is free from ambiguity, and helps to clarify the issue between the two doctrines. The doctrine of ethical indeterminism involves the assumption of a universe in which there are absolutely contingent facts, a universe that has in it some degree of loose play, a universe that is in part indeterminate. This assumption means that there are absolute novelties occurring in our world, fresh increments of reality, positive additions, things which do not grow out of what is already real, but are creative increments upon that reality. In short, that the real-world is in process of making, and has not an already determinate character.

The opposing doctrine of ethical determinism involves the assumption of a universe which is completely determinate; in which therefore there can be no contingent events; in which there can be no real additions, no absolute novelties, or increments upon reality already there. The determinist's real world is not in process of making, it does not grow.

The student will see that the so-called free-will dispute involves the doctrines of monism and pluralism. We have seen that monism is a deterministic conception of the world, while pluralism is indeterministic. It would seem then, that whoever upholds the doctrine of determinism should also maintain the monistic conception of the world; while the consistent upholder of ethical indeterminism will be a pluralist. I do not wish to close discussion of this point, I will only suggest that metaphysical monism logically goes with ethical determinism, and pluralism is the metaphysical doctrine which logically goes with ethical indeterminism.

The dispute between the determinist and the indeterminist, being primarily a metaphysical one, it would follow that the ethical philosopher who accepts the doctrine that ethics are independent of metaphysics is not interested in this old controversy. He should maintain that neither doctrine has any bearing upon the problem of morality. But, as a matter of fact, ethical philosophers are still engaged in this historic dispute, and accordingly we must include this controversy in our present study. The central point of the controversy relates to the consequences for morality which follow the acceptance of either of these doctrines of the will. And first let us ask, what are the ethical consequences of determinism?

The indeterminist is ready with his answer, that these consequences are most injurious to morality. He asserts that a consistent determinist cannot justify his ethical valuations, that the distinctions of right and wrong ought to have no meaning for him; the ethical judgment should be impossible; he ought not to accept responsibility for his own actions, nor hold others accountable for *their* actions. He

should neither approve nor condemn others, nor can he consistently advocate the infliction of punishment for wrong conduct.

The determinist denies that any of these consequences follow from his doctrine; on the contrary, it is the doctrine of *in*determinism which subverts morality, for (he argues) if human actions are contingent they are without reason for being at all; they are disconnected from other parts of reality, and therefore irrational, being inexplicable, and since they are irrational they can have no moral value; to call them good or bad is to use words without meaning. ethical values cannot be attached to such things. Furthermore, he continues, indeterminism makes responsibility impossible, how can there be responsibility for what is by definition contingent, dependent on nothing? Again, indeterminisn, the determinist insists, destroys the foundation of moral education, moral discipline by punishment. The basis of moral training is the assumption that motives, reasons, are really efficient in securing desirable conduct, in discouraging undesirable conduct. But, if human actions are contingent these motives are not effective, and the sole reason for instruction and discipline is taken away. Thus indeterminism destroys the rational foundation of morality.

On the contrary, the determinist contends that his doctrine is not only compatible with morality, but that it is the only doctrine which *is* compatible with our ethical valuations and with our endeavor to maintain morality. Take, for instance, the distinctions, right, wrong, good, and bad. These valuations, says the determinist, are attached to actions because of their bearing upon human welfare, and

that is entirely irrespective of their being determined or indetermined in the manner of their occurrence. An action is good, if it expresses the intention and carries out the intention to promote human well-being. The goodness of that action is in no way affected by the fact that this action followed from the character and situation of the man who performed this act. Again, take the fact of approbation and disapprobation; the justification for this treatment of an individual is the influence this expression of the minds of his social fellows will have in securing the performance of good actions, and the prevention of the performance of bad actions. Only on the assumption that approbation and disapprobation do operate as real determiners of actions can they be justified. It is on ethical grounds that the public disapprobation is justified. The social judgment is a potent influence in determining the individual's conduct, who more commonly judges his actions by the social standard than by a standard of his own creation. Morality is largely a matter of social action. It is just because man's actions are determined that we can hope to change them by the strong determinant of social judgment, especially when that judgment takes effect in punishment. Determinism alone serves the great interest of morality, by making effective the encouragement to good conduct and the deterrative from bad conduct.

In this way will the upholder of determinism defend his doctrine against the objection that it is incompatible with our ethical judgments and our enforcement of them.

But against the determinist's position the indeterminist maintains that regret and disapprobation lose their force if determinism is the true doctrine. The sting of moral

regret is taken out of it if the judgment, "It might have been" is illusive. The possibility of a different action in the place of the one disapproved of is the sine qua non of disapprobation which has any ethical significance. I can regret something which was *fated* to occur, in the sense of wishing something else had been fated; but there is no ethical character in such a regret. The fact, that manifested disapprobation is a determinant of a more desirable kind of conduct, does not justify the disapprobation, unless the action disapproved of *merited* that disapprobation. Take away the demerit of the action, and the disapprobation is without rational ground. To take away the possibility of acting otherwise, is to take away from that action its demerit; and this is what determinism does.

(2) Determinism destroys morality, because it destroys moral agency. A moral agent is a being who is an originating center of action, to whom an action can be carried back for final judgment, for imputation. In the system of determinism there is no such originating agency; only in appearance is the human individual such an originating agency; in reality he is not an agent, but a transmitter, a continuator, a sort of distributing center of determining agencies, or influences which have their origin elsewhere, and only *pass through him*. The attempt of the determinist to save personal responsibility by saying that the individual determines himself in his action, that the action expresses his own self or character, is a vain expedient. In consistent determinism, there is no *self*-determination. The *determining* does not originate in this *self*, but in those conditions whatever they are, which have *made* this self. This very self is a resultant of the sum total of determining agencies and

circumstances. To say that a man's character determines his action, is to overlook the fact that in this scheme a man does not make his character, and that whatever makes a man's character must be the explainer of his action.

But the determinist will reply that there is imputed to him the doctrine of fatalism, and that doctrine he as heartily repudiates as does the indeterminist. Determinism and Fatalism are totally different doctrines. He says, "I fully admit that fatalism is incompatible with moral responsibility, indeed with the ethical character of actions; but my doctrine in an ethical respect is as far removed from fatalism, as the East is from the West." To this the indeterminist replies. "This is just the point of my attack, your doctrine *is* fatalism, when made thoroughgoing and consistent. For the essence of fatalism is predetermination; and in the last analysis this predetermination must be carried back to, and lodged in those first things which once laid down, carry the certainty of all later things. Therefore, in tracing back the determiners of human action, you cannot stop with the human individual, his circumstances at the time; you must go back to his inheritance, to his ancestors, back also to anterior circumstances which determined the immediate circumstances of the action. And where can you stop in this regress, short of those first things, before the beginning of time? In short, every fact which you would say is a determiner of this present action, is itself but a link in a chain of determiners, running back into an infinite past, or away to the bounds of the universe—if it have bounds. A deterministic universe involves this fate of the individual and his action. To say that this individual act was determined, and to say it was fated, is to use two expressions for essen-

tially the same thing. If therefore moraltiy is incompatible with fatalism, it is equally incompatible with determinism."

With this last objection to determinism the indeterminist returns to the defence of his own doctrine; and it must be admitted that the doctrine encounters serious difficulties when confronted with facts. Some of these facts have been pointed out by the determinist, namely the fact of moral education, use of instruction, correction, etc., to ensure better conduct, the infliction of punishment with a view to deter from the commission of socially undesirable actions. To these may be added the extension of the law of habit over our moral actions, the influence of character, of the circumstances in which one acts, appetites, passions, the solicitations and suggestions of other individuals, in short the entire context of each action we perform. Again, the fact that we predict human actions with a considerable degree of success, that sciences are based upon uniformities of human action. Now, is it possible to harmonize these indisputable facts with the theory of indeterminism?"

The indeterminist answers, "These facts are no objections to my theory if that theory is rightly understood. Indeterminism does not mean that there is *no* determination in that part of the universe which includes our human actions; the doctrine asserts the existence of undetermined, of contingent things; and it asserts that there is contingency, indetermination, in the case of our choices, or our actions. The indeterminist conception of the universe does not mean that there are no such things in the universe as uniformities, habits, coherency, logical consistency, the influence of one thing on another, of mind upon mind. The doctrine denies that this determination is absolute, to the

exclusion of alternative possibilities, of truly open points for fresh beginnings."

"In respect to our actions, indeterminism asserts that every action of the will has in it an element of originality, something not contained in what already is in its antecedents; and therefore that particular action could not be infallibly predicted, even did some mind possess complete knowledge of all its antecedents. This action in a way can be explained after it has come to be actual, but it was not forseeable while it was a possibility. Now this factor of originality which carries the possibility of acting otherwise, in the sense that this particular action was not the only possible one, coexists with other factors which are of a different nature; they are such factors as routine, appetites, desires, thought, reasoning, etc., so that our actual world presents a mixture of determination and indetermination, neither of which is the absolute feature of the world. Of course, such a universe cannot be the closed system of monism, for, as we have seen, in that universe there can be nothing really new; and consequently that universe is through and through deterministic. But—concludes the indeterminist—need the world be that of the pluralist? May there not be room for all the indeterminism which morality calls for in a world in which there is One who is Creator and Supreme Ruler, whose will is done, but done through wills that are really ours, and are free? No thinker has yet shown how there can be such a universe; but equally true is it, that no thinker has demonstrated its impossibility. Such being the state of our knowledge, are we not free to postulate the sort of universe which offers the most satisfying solution of the ethical problem?"

The Problem of the Good and the Ethical End

The conception of good presupposes a conscious being; and the good which possesses ethical significance presupposes that the conscious being is man. In terms of human consciousness, we may define a good as that in which a human being finds satisfaction. It is the object of desire, which when attained, brings a satisfying form of experience.

We first note: some distinctions in good, or kinds of good.

A good may be the state of one's own being or self. Thus pleasure is a good, so is intelligence, power, success, virtue, etc. A good is anything which is adapted to produce a desirable state of being. Thus wealth, friends, social position, fortune in any form, are goods—good things.

Again, good is ultimate, supreme, or relative, proximate, subordinate. Ultimate good is that which is good in itself considered, good on its own account, desired for its own sake. Relative good is that which is good only in relation to something else, good *for* something. Thus, pleasure is regarded by some ethical philosophers as the ultimate good, while knowledge, wealth, fame, and virtue are good, because they conduce to pleasurable consciousness.

Once more; a distinction is made between natural good and ethical or moral good. This distinction is fundamental in ethics, and at the same time, it constitutes a problem for the ethical philosopher. Types of ethical theories are distinguished by the conception of the moral good, or moral goodness, which is made the basis in each theory. For our present purpose, a distinction in the meaning of the terms is sufficient, and it may be made in the following way.

We can give the predicate, moral good, only to a person, to a person's character, disposition, motives, and actions. The powers, capabilities, which this person possesses are natural goods. He acquires moral goodness, according to his use of these powers. A person is not morally good by nature, the person becomes morally good only through action and by habit. The morally good always presupposes natural good. Unless there were something which is naturally good there could be nothing which is morally good; the moral good is created by the exercise, the pursuit, the use of natural good. It is the function of ethics to determine in what way the pursuit of natural good, the use of natural good, creates moral good.

One more distinction, and we pass to the special problem which gives the title of this section. The term good in its moral signification is used interchangeably with the term right, and bad with the term wrong; but these terms reflect a distinction in points of view, and point back to ethical conceptions which are quite distinct and between which the distinction is not unimportant. Right, in its ethical significance, implies an authoritative rule or standard of judgment, it signifies conformity to this rule or standard. An action or purpose is right, if it conforms to this rule or standard; an action which does not conform to this rule is wrong. Good implies an end or result which the action tends to realize or to produce. A good action is one which tends to produce a desirable result, and is adapted to attain some end that is good; a bad action is one which has the opposite tendency. Now, these two ways of looking at actions and of judging their character, characterize two different methods of determining the ethical character of

conduct, two ways of judging conduct. The one is formalistic, the other is teleological. These terms very clearly bring out the difference between these two methods in ethics. Formalistic ethics makes the conformity of an action to a rule, or law, or command, the criterion of its goodness. Teleological ethics on the other hand makes adaptation to an end, to a result, the criterion of the goodness in actions. In formalistic ethics, the standard of judgment is a rule, law, command; in teleological ethics the standard of judgment is an end, to which the action tends.

But a more important difference is apt to be associated with this difference in methods of ethical judgment. Formalism in ethics may go farther than the criterion by which the judgment is determined. Thus, I may hold that my conscience as the enouncement of moral law enables me to know *when* my conduct is right; but I may hold also that this conduct is not ethically good merely because my conscience, or moral law, commands it; I may maintain that the goodness of the action consists in the conduciveness of this action to welfare. I may hold that action derives its goodness from the end it seeks, and not the rule it follows, or the law it obeys. But I may go farther in my formalism, and maintain that the goodness of my action consists solely in its being conformed to moral law; I may maintain that my action is good, only if I obey moral law because moral law commands. I shall therefore say, my action is not good because it is adapted to an end, but because it obeys a law or a command. Thus, formalistic and teleological ethics may signify two profoundly different types of ethical theory.

But it is time to close this preliminary discussion and take up our problem, the good, the aim of life. The good which the problem contemplates is ultimate or highest good. And our problem can be formulated in the question, What is man's ultimate good, the ultimate end of action, and the standard of ethical value? In answer to this question we meet three theories:

1. The theory of hedonism.

2. Energism, or the theory which makes perfection of life the ultimate good.

3. The theory which makes the good will or duty for duty's sake the highest good.

We begin with the theory of hedonism. This doctrine must be carefully defined; for misconceptions of the doctrine have been at the bottom of much of the adverse criticism it has encountered. The general doctrine asserts, that pleasurable consciousness, or happiness, is the ultimate good, the final end of action, and the standard of ethical judgment. Hedonism presents two forms, according as this pleasurable consciousness is that of the individual, or that of the greatest number of beings whose happiness is considered in the action under view. The first form of hedonism it is customary to call egoism, or egoistic hedonism. The second is more commonly called utilitarianism; but it is more appropriately called universalistic hedonism. The egoistic hedonist maintains that the only maximum happiness he is bound to take as his ultimate good is his own happiness; that he can regard the happiness of others so far as the promotion of their happiness is a means to the attainment of his own greatest happiness, or only so far as regard for the happiness of others does not interfere with

the pursuit of his own maximum happiness. The universalistic hedonist or utilitarian asserts that the greatest possible happiness or pleasurable consciousness which the individual is bound to consider in his action is that of the greatest possible number of beings who can be affected by human action.

It is the general doctrine only that will occupy us at present. Let us get the meaning of this theory accurately determined. The hedonist does not mean that this maximal happiness is always or should always be the *conscious* aim of the individual in his action. The individual may be unable to see any connection between the particular action he is about to perform, or is contemplating, and this greatest possible happiness. He may be quite unable to determine whether an action he is about to perform is in itself adapted to produce more happiness than misery; and consequently were a forecast of the results of his action as bearing upon maximal happiness the condition of his acting ethically, it would be impossible for the individual to act wisely in any situation, since he could not tell whether his purposed action would be a good or a bad action. The theory does not mean that the individual is to guide his conduct by any connection he can discern between that conduct and greatest happiness. The end by which the individual is to guide his action, is the proximate, not ultimate, end; such ends are, for instance, honesty, veracity, justice, etc., or rather the moral rules which enjoin these forms of action; conformity with moral laws or customs which have become established in the society to which he belongs may be the proximate ends at which the individual directly aims, and by which he deter mines the moral quality of his actions. Established moral

rules are for the individual in moral action what guide-boards are for the traveller who knows his ultimate destination, but does not know the best road which will take him there. The individual may seek the greatest possible happiness as the ultimate good, but he may not know by what ways of acting he can attain that destination of his will. Moral rules, the recognized virtues, are guide-boards, which tell him the sort of actions which are best adapted to reach the end he seeks. Therefore, if he will attain the ultimate good, which he assumes to be happiness, he must give his attention to the guide-boards, he must obey moral law, practice the virtues of truth, honesty, justice, etc.

Again, hedonism is not incompatible with the fact that the individual is and should be interested in other things than happiness, that he may come to value other objects, and think they are supremely desirable for their own sake, nay, may he find more pleasure in the pursuit of them than in the pursuit of his happiness. The individual who gives his attention almost exclusively to the moral guide-boards—intent upon the practice of virtues; and forming the habit of obeying moral rules, and consequently experiencing the desirable consequences of so acting, may come to identify these proximate ends with the ultimate good, these means with the end, so that he transfers the interest of the end to the means, just as a sportsman may come to find the pleasure of pursuit greater than the pleasure of getting the game, and he may say he hunts for the sake of hunting, he fishes for the pleasure of fishing and not in order to catch fish. But the hedonist philosopher maintains that when we sit down in a cool hour and reflect upon our actions, we discover that their conduciveness to happiness is the only

satisfactory reason that can be given for performing what we call good actions, and the only thing which makes our interest in them a rational interest. The miser, in consequence of habitual association of money with his ruling passion, may think that money is the supreme good, and may love money itself; but it is some other end to which money is a means which *justifies* his interest in money. That an interest in something which is not happiness controls conduct, is quite compatible with the theory of hedonism. The theory requires that we keep distinct the practical problem of means and the problem of the end. The essence of the hedonist's doctrine is, that our human existence is ultimately desirable, because of the pleasurable consciousness it yields, and that our actions have moral quality according as they tend to promote this kind of existence.

We come next to the proof of hedonism. The first proof is drawn from the conception of human welfare or well-being. Reflective analysis of our meaning when we think of the ultimately desirable kind of human existence leads to the discernment that this ultimately valuable kind of existence is this state of consciousness. We can evaluate other things only according as they tend to issue in this form of consciousness. Happy consciousness is the only state or condition of being in which our rational activity can come to rest. The only kind of experience, be it action or state, of which we cannot ask *for* what is it good, or why is it good and desirable, is pleasurable consciousness. Here our quest for ultimate good ends, because it has reached its goal.

The second proof of hedonism is the fact that, if happiness were to cease, if no beings could be either happy or miserable, there would be neither good nor bad actions.

Our value judgments would lose their basis. The inference from this fact is, that it is their conduciveness to happiness or to the opposite condition that gives to actions their goodness or badness.

The third reason in support of hedonism is, that this doctrine affords a basis on which alone the conflicting judgments on particular actions can be harmonized. The discrepancies in ethical judgments which we encounter in current morality are readily removed, if we accept the hedonistic standard of ultimate judgment. The method of procedure by which in the morality of common sense we *do* harmonize discrepant judgments tacitly presupposes the hedonistic criterion of good conduct. In fact, the whole body of moral rules which make up current morality is intelligible and tenable only if these rules or laws are interpreted as middle axioms, which define the form of conduct or kind of actions through which maximal happiness can be secured. Our accepted moral rules and standards support the theory of hedonism.

Their origin is best explained if we assume that hedonistic valuation has led to the selection of these forms of conduct as the forms which are best adapted to attain maximal happiness.

OBJECTIONS TO THE THEORY OF HEDONISM

Hedonism, though it is upheld by some of the ablest ethical philosophers, has never gained popular support; and it has against it the larger number of philosophical thinkers. The following are perhaps the most serious difficulties which the theory encounters.

First, it is objected to this theory that the only consistent

form of hedonism is egoism. The theory which makes pleasure the ultimate good, logically leads to a selfish theory of life. There is no reasoning by which the egoist can be convinced that it is his duty to regard anybody's happiness but his own. He can be led to see that it is his interest to promote the happiness of his fellowmen, if he would secure a maximum of happiness for himself. Society, by its favor and disapprobation, may so affect the individual who is disposed to seek his own well-being only, that the welfare of others may become an interest for him. But, that interest is not an interest in the happiness of others on *their* account, but solely on *his own* account. The egoist reasons in this way: If the greatest possible happiness is the ultimate good, this end is more likely to be attained if each individual makes his own happiness his end than it would be, did each make the happiness of *others* his end, because the individual knows better what will secure his own happiness than he can possibly know what will promote the happiness of others. How then can the egoist be reasonably convinced that it is his duty to seek universal happiness as the ultimate good, and not his own happiness? Such is the first objection to hedonism.

Against this reasoning the utilitarian maintains that, since the greatest possible happiness is the ultimate end, the happiness of *one* individual is worth no more than the happiness of another. Each individual counts for one, and no one counts for more than one, in the distribution of happiness. The egoistic hedonist, consequently, contradicts the fundamental doctrine of hedonism, which does not permit the individual to value his own happiness more highly than the happiness of others. The egoist if he re-

mains a hedonist cannot justify the supreme value he puts upon his own happiness.

The second objection which is made to hedonism is to this effect; consistent hedonism can recognize no difference in the quality of pleasure. The theory permits only a quantitative estimation of pleasure, only a quantitative scale of valuation; one pleasure should be preferred to another pleasure solely because it is greater in amount, not because it is better in kind. Now, the hedonist cannot admit that pleasures differ in quality without surrendering his fundamental position; for, to say that the pleasure A is a better sort of pleasure than the pleasure B, or that it is a higher, a nobler pleasure, involves the reference to a standard of valuation which is itself not pleasure; and that involves the admission that something is ultimately valuable which is not pleasure. Now, the denial of a qualitative difference in pleasures goes squarely against universal judgment. One of the clearest distinctions we make in our valuations is that between kinds of happiness. We unhesitatingly say the pleasure of a man is more desirable than the pleasure of a pig, even did the pig have the larger amount of pig satisfaction. Everybody assents to John Stuart Mill's dictum, "It is better to be a man unsatisfied, than a satisfied pig." Who would not prefer the lot of a Socrates to the pleasure of the happiest pig that ever grunted in his complete pig satisfaction?

Opponents of hedonism have seen in this objection a fatal dilemma for the hedonist. If he rejects the qualitative difference in pleasures, he must run against the surest fact in our ethical valuations. If he *admits* this qualitative difference, he logically abandons his theory; for he can jus-

tify this difference in kind only as he appeals to a standard of valuation which is other than pleasure.

But cannot the hedonist face this dilemma, and challenge the proposition of the objector? "Why cannot pleasures as pleasures differ in quality as well as in degree?" the Hedonist asks. "Why cannot one pleasure be different from another in its *quality*, just as one sensation differs from another in *its* quality? Why do not qualities belong to pleasures as pleasures, as definite states of consciousness, just as qualities belong to sensations as definite states of consciousness? Does the anti-hedonist reply, That which makes one pleasure better, or higher, than another, is the better function or power which yields it, the better mind, which experiences the pleasure?" The hedonist will on his part maintain that the function is better, or nobler, because it yields a better, a finer pleasure, the function, the power, or the mind is evaluated according to the quality of the pleasurable consciousness, which the function produces, or which characterizes the person we call the better or nobler in the scale of valuation.

Thus does the hedonist justify his assertion that pleasures can differ in quality as well as in quantity, and the doctrine of Hedonism still be true. But at this point the hedonistic theory meets a third objection. This objection is, that Hedonism reverses the true relation between the good and pleasurable consciousness. Hedonism asserts that something is good, because it produces pleasure, the pleasure-producing tendency is that wherein the goodness of an action or an object consists; whereas the relation is the reverse, something is first good, and because good it produces a pleasurable consciousness. The hedonist's fallacy is this:

since good is the object of desire, and the satisfaction of desire is pleasant, this pleasure is the good which is desired; whereas, that which satisfies desire is something entirely distinct from the pleasure which attends the satisfaction of that desire. The pleasure is not that which satisfies the desire, but the sign that the desire is satisfied. Pleasure is not that which our will seeks as its end, but the indicator that the will has attained its end. The normal functioning of the organism is pleasurable, but it does not follow from this fact that pleasurable consciousness is that for the sake of which the functioning takes place, or is that which gives the value to organic actions.

The hedonist meets this objection by the straight denial that he supports his doctrine by the reasoning attributed to him. It is not from the fact that we experience pleasure in the attainment of the object of desire that he infers that pleasure is the object of desire, nor does he conclude from the biological fact that the normal exercise of the organism is pleasurable, that pleasure is the biological aim. The hedonist's contention is, that we cannot make any other form of good than a felicific consciousness, an *ultimate* end of rational pursuit. That the standard of ultimate valuation is pleasurable consciousness. And the reasons in support of this proposition he has already given. The hedonist accordingly will maintain that this objection does not touch his position.

But what looks to be a more serious objection to hedonism is the hedonist's conception of pleasure, or better, the way in which the hedonist treats pleasure. The substance of this fourth objection is, that the hedonist treats pleasure as if it could be dissociated from the *persons* whose pleasure

is being considered; as if a pleasure of a definite amount or kind could be the same in any two individuals. The hedonist appears to assume that pleasure is like a quantity of goods, which can be divided into equal parts or quantities, and be distributed among so many individuals. The hedonist apparently supposes the happiness of persons can be made an end apart from the persons themselves who are to be made happy.

"Happiness," the objection continues "is not something which can be considered in abstraction from personalities, and when we include persons in the ethical aim we must include what is not happiness, but that which gives to happiness its meaning and value. It is the persons who are happy, and not happiness apart from these persons, which ethical theory must make fundamental in determining the significance of pleasure, and its place in a rational scheme of life."

The hedonist can say in answer to this objection: Notwithstanding the fact that individuals differ in respect to the sources of their happiness, so that no two individuals are happy for just the same reasons, it is the happiness of each individual which is the ultimately desirable thing for that individual, and the standard by which he must rationally value all other things. It is important to distinguish between the hedonist's doctrine of value and the hedonist's method by which he would practically realize his ideal. The objection last made does not affect the theory of value, since that only asserts that maximum happiness, however it may be obtained, is the ultimate good. Whatever force the objection has, must be in its bearing upon the hedonistic method of obtaining maximum happiness. Nor is it true

that hedonism as a method needs to make the sort of assumption or to proceed in the manner which the objection alleges. The practical problem for the hedonist is to ascertain in what way the greatest happiness of the greatest number can best be secured. The hedonist does not suppose this happiness can be secured in disregard of the persons themselves, their individualities of temperament, mode of life, circumstances and ideals. No hedonist proposes to make happiness dissociated from human individuals a practical aim. Experience has taught man to some extent in what ways happiness can be attained; the hedonist follows these ways. As fast as man by experience in living with his fellows shall find out other or better ways in which this maximum happiness of all can be provided the hedonist will adopt these ways. He is willing to admit that he is far from the satisfactory solution of the practical problem, how to bring to all the ultimate good. But this very imperfect realization of the ethical ideal is no objection to the ideal itself. It can well be true, that happiness is our being's end and aim, though we come very far short of its attainment. The hedonist concludes concerning this last objection that his theory is in no manner affected by it, and as an objection to his method it is not relevant, since his method does not involve the false assumptions that are credited to his doctrine.

But hedonism must face one more objection. It is this. The theory of hedonism is contradicted by the testimony of all great literature, of the biographies of great men, by the deeds of the heroes and martyrs of the race. Human nature in its great moments, in its great achievements in art, in literature, and in history, has been impelled by other

motives than regard for happiness either of the individual or the happiness of the race. The splendid heroisms the sublime devotion to principles, to great causes, which command our admiration and reverence have been possible only because the hero, the martyr, valued something higher than happiness either for himself or for others. The lesson borne in from man's life in the past is that a higher than happiness has called out from him all his greatest, his noblest, his most beneficent actions. The highest happiness has come to the individual and to others, only when the individual has aimed at something other than happiness for himself and for others. The hedonist has the great experience of the race against him.

The hedonist will for answer to this objection content himself with a single question, "Suppose the cause in which the hero fights or the martyr dies was one which brought only misery to mankind, suppose the ideal of the best life which we find in art or in literature was adapted only to cause unhappiness were it real, would we justify the devotion and the sacrifice of the hero and the martyr, or would we approve of the ideal presented in a work of art or in literature? If we could not do this, how can the inference be avoided that when we come to final valuation and ultimate good, happiness of life is that good?"

But it is time to pass on to the second ethical theory, the theory which makes the realization of human capabilities the ultimate good and the aim of life. According to this theory it is life itself, the exercise and the perfection of it through the exercise of living functions, in which man's good consists. Energism is one name for this doctrine, since the essential feature of it is the emphasis put upon the

activity side of our life. Good does not primarily consist in a state of conscious existence, nor in a kind of consciousness, whether felicific as hedonism supposes or otherwise, but in action, and in the unfolding and perfection of our nature. In short, ultimate good consists in the fullness of life and in the exercise of life. Self-realization is another name for this doctrine; but this term requires modification in the customary meaning of it, otherwise it would designate a doctrine of egoism. The Self whose realization constitutes the good is not that of the individual only, but a self which is common to this individual and all other selves. According to this meaning of the self, the individual cannot set before himself his own ultimate good, without also setting before himself as the good he is bound to realize the good of every other individual self. No one can find his own true good, who does not find it in a good which is common to him and all other selves. To make the most of one's self and of other selves is the meaning of this doctrine, stated in terms of self-realization.

So much for the meaning of the theory. In proceeding to discuss this doctrine, we note first its relation to hedonism. This theory gives a place to happiness as a constituent of ultimate good; happiness is the normal attendant and result of the exercise and development of life, but it is not happiness which gives to life its supreme value. Even were it true for every individual, that the complete development of himself brought with it complete happiness, the worth of his life would not be measured by that happiness, rather would it be the value of his developed life which would determine the value of his happiness.

But this theory of the good encounters difficulties which its

advocates generally have not seriously considered. The first is this: The theory can make no clear and distinct separation between the end itself, and the means by which the end is to be attained. The same thing is alternately means and end. If the question is, "What is the end of life?" the answer must be, "Its own complete realization or fulfillment." When asked what are the means by which this realization is to be affected the answer must be in terms of the same capabilities, the realization of which constitutes the end or the good sought. The upholder of this doctrine does not deny that to some extent the doctrine involves this circular process of what seem to be alternate means and ends. But he points out a like process in our interpretation of every organism. The end of the organism is the harmonious and complete development of itself or its species; the means by which this end is attained is the exercise of the same functions, in whose complete realization the perfection of the organism consists. The fulness of life is the end, and this end is attained by living; but in reality this fulness and perfect development of life is not identical with the mere functioning of the special organs taken in their sum total; it has a meaning and a value which is entirely distinct; means and end are not identical things in organic development. So with the moral life; end and means do not coincide; we can say that the relation between the end and the specific activities by which the end is attained is an organic one; but this final stage in the development of the moral organism is the end, which, existing as idea, directs the actions by which it is to be realized, and as ultimate good is the standard for evaluating each activity, each exercise of living function through which as means this good is realized.

But we meet a more serious difficulty when we try to define the regulative principle for the system of activities, the different modes of conduct, in which this self-realization consists. Clearly there must be some principle of this sort; for the exercise of each capability or power cannot be absolute, some limit must be set to the exercise and development of the special functions of our nature.

The development sought must be that of an organism; it must be the systematic and harmonious development of *all* our human capabilities. Now, here is the problem, To find the regulative principle, or conception, which will secure this system of duly proportioned and harmonious actions. How shall this regulative and evaluating principle be found? Shall we seek it in some one of our human functions? If so, which one shall it be? Shall we fall back upon the theory of an innate intuition, an *a priori* principle, as the rationalists do? We have seen how futile that method is. We can no more assume that an ethical intuition or a priori informant enables us to know when we are on the right road to our moral goal, than we can assume a corresponding intuition to guide us in reaching the goal of knowledge. But suppose this principle has been found; must it not be something which is distinct from the special powers or functions themselves, the balanced and harmonious exercise of which secures the moving equilibrium, on which the perfection of life depends? Here is the advantage which hedonism possesses. It supplies a regulative principle and a standard of relative evaluation. Happiness as the end is clearly distinct from the activities, or conduct, by which it is produced; it can therefore be a

regulative principle for determining the relative value of each special function and in its exercise.

Now, if this theory we are examining does have a regulative principle which is distinct from the exercise of functions, of life, must it not be this *something*, whatever it is, and not the mere living itself, which is also the standard of value, and consequently is itself the ultimate good? The advocate of the Self-realization theory can reply. That it would be perfectly consistent to take happiness as the regulative principle in question; for, assuming that maximal pleasure coincides with the perfection of life, the perfect exercise of living functions, this happiness would be the criterion of the right and successful exercise of life; it would be the sign that life had attained its goal, its ultimate good; but it would not follow that this happy consciousness is itself the end or the ultimate good. The difference between hedonism and this theory is in their interpretation of happiness, its significance in the ethical life, hedonism making happiness the goal, while the perfection theory makes it the sign that the goal has been reached.

We come now to the third conception of the good, the theory which holds that ultimate good is the good will, the goodness of this will consisting in its obedience to moral law, solely because moral law commands this unconditional obedience. Duty for duty's sake is another name for this theory. The difference between this conception of morality, and the conception which the other two theories share, is a radical one. The other theories are teleological; the peculiarity of this third theory is its attempt to make the form of action its goodness, and the end of action. It is the attempt to unite a teleological meaning of conduct with formalistic

ethics. The theory we are now to examine is that of Kant, whose famous dictum of the good will is familiar to all students in ethics. Kant declares that the only thing which is absolutely, unconditionally good, in this world or any other, is the good will. This will is good in and of itself, and not because of anything which it produces, or any consequences which flow from it. In answer to the question, what makes the will good, the Kantian answer is, the conformity of this will to moral law, or the categorical imperative of duty. It is obedience to moral law because it *is* moral law, and therefore from the sole motive of duty, which makes the will good. Now it is this goodness of the will, or the character of the person which consists in the disposition to obey moral law or to do always one's duty for duty's sake, which is at the same time the ultimate good, the end which man should set before himself for complete realization.

In discussing this theory of morality, we will begin with an interesting feature it presents, namely, the peculiar place it gives to happiness in the moral life. Happiness being a natural good, something which all human beings *do* seek, the pursuit of it cannot be *moral* good, nor its opposite, *i.e.*, it cannot have moral significance. And yet morality is concerned with happiness. In three ways does the good will have to do with this universal human interest. (1) Inasmuch as happiness is a natural good, in which man naturally seeks satisfaction, happiness may make it easier to fulfill the law of duty, a happy life may be more efficient in virtue, and therefore it is a part of the obedience to moral law to seek happiness for one's self and for others.

(2) Again, happiness being so large an interest, our action

is largely occupied in securing happiness, and we cannot avoid affecting each other's well-being, according as we aid or interfere with the attainment of this natural good. Consequently, moral law commands that no one seek happiness for himself, if by so doing he diminishes the happiness of his fellowmen.

(3) Since happiness is a natural good, without which human life is not completely satisfied, the complete good of man must include happiness as a constituent part. Now the happiness which is essential to the complete good is happiness that is proportional to moral desert. It is that which must be added to righteousness to give blessedness. The morally good man cannot, by his own power or by his good will, make himself happy in proportion to his desert of happiness; all he can do as a moral agent, is to create goodness, and to merit happiness. The moral order of the world alone can unite happiness and goodness in the personal life. But if a man makes himself worthy of happiness, he can rationally expect to become as happy as he deserves to be; he can trust the moral order of the world *sometime*, if not in this life, in the life after death, to give to his life this necessary completion.

Examining this theory more closely, we shall find that the most serious difficulty it encounters springs from its formalistic conception of morality. The moral law is without content. The categorical imperative does not tell us *what* it is our duty to do. Merely to be told that we must obey moral law, or do our duty, does not enlighten us in the most important matter, namely, what we are to do in obeying moral law. We ask, What does moral law command? and it is no answer to this question to be told that it com-

mands us to obey moral law; that is mere tautology. Or, suppose our question is, What is the ultimate good? We are answered, The goodness of the will, in other words being good; and if we ask, how are we to attain this end? the answer must be—must it not?—by being good. Thus are end and means identical; the action becomes its own end, and we are condemned to the fruitless labor of moving in a circle.

The Kantian doctrine seeks to obviate this difficulty by means of what may be called the maxim of duty, which is, Act only from that maxim which you can will to be law universal. This maxim is based upon the assumed universality of moral law, *i.e.*, on the assumption that what is duty for one person in a given situation, would be duty for everybody in that situation; hence the maxim affords a means of determining whether the action one contemplates in a particular situation is or is not the action moral law commands. To use one of Kant's illustrations: Suppose a man who holds the property of another in trust should be inclined to appropriate that money for his own uses. He could test the morality of the proposed action by asking himself if he could will that every man in the same situation should do the same thing, in other words, could he will that the maxim he proposes should be made law universal? Thus does the Kantian theory seem to obviate the difficulty we have raised, and to meet the objection that its formalism makes it impracticable. The moral law does seem to supply a criterion of duty, it does seem possible to know *when* we are obeying moral law.

But is this maxim susceptible of universal application? Does it in every instance afford a criterion of duty? And is

the assumption on which it is based an unquestionable one, namely, whatever it is right for one man to do, it is right for every man to do in the same situation? To recur to Kant's illustration of a man who, overwhelmed by calamities, is contemplating suicide. Might it not be right for *this* man to end a life that has become insupportable, while it would not be right for every man to do so in the same situation? But, granting that Kant's maxim of duty is not open to this criticism, the really vulnerable point in this theory of morality is still its formalistic conception of moral good. The vulnerable point is this: The theory must assume law or command as such can create moral obligation to obey it; that to obey a law merely as a law creates ethical value; that something is right, because it is commanded, instead of being commanded because it is right. This assumption is untenable; the foundation of our distinctions of right and wrong is purely arbitrary on this assumption; and a rational ground of obligation is impossible. Unless that which is commanded is assumed to be right, we can recognize no obligation to obey that command. Even supposing we believe the command to come from God, our obligation to obey could be justified only did we first believe God is good, and therefore what he commands is good. The whole strength and persuasiveness of the Kantian doctrine of the good will, or categorical imperative of the supremacy of duty, is derived from this unrecognized assumption of a good, from which law derives its right to command, and from which comes our obligation to obey. The conclusion of the matter would seem to be, that if we are to have a philosophy of conduct our choice of theories of the good must lie between

hedonism in some form and the theory which makes perfection of life the good.

II. THE PROBLEM OF RELIGION

We have now concluded the problem of morality. The last of the problems to engage our study is the problem of religion.

As with the ethical problem, so the problem of religion breaks up into several special problems. Of these our study will limit itself to the examination of these two problems, namely: (1) The essential nature of religion; (2) The conception of God.

The Essential Nature of Religion

We begin with the problem concerning the essential nature of religion. It is the task of a philosophy of religion, on the basis of the results reached by the psychological and historical study of religion, to determine its essential nature, its meaning and significance for a theory of the world.

Analysis of religious experience discloses in it the three essential functions which are inseparable in all mental experience, cognition, feeling, and will. And according as one or the other of these elements is preponderant, the religion of an individual may be characterized as intellectualistic or emotional or voluntaristic. The fundamental note of religion is faith, and the vital element in faith is the sense of the objective reality of its object. "He that cometh to God must believe that He is." This claim of truth is the cognitive moment in religion. But religion is also a manner of feeling. Religion involves an emotional response to

God not less than an intellectual apprehension, nay the deep roots of religion are in our feeling nature. The throbbing heart of piety is worshipping love, trust, submission and loyalty.

The great passions, the profoundest emotional stirrings of our nature, are religious. "God is the sea where all our passions roll." Not less does will enter into the life of religion. The will to believe, or belief because our volitional nature demands it, is one of the most indisputable facts of religious experience.

It is vital to the conception of religion to recognize the cognitive moment. It may be doubted if definitions of religion which are apparently framed to exclude intellect from Religion are really successful. For instance, the classic definition of Schleiermacher, according to which religion is a feeling state, namely, the feeling of absolute dependence, really implies a cognitive attitude toward a reality, a Being on whom we are absolutely dependent. Indeed, Schleiermacher's own definition of religion as the sense, the feeling, of the Infinite, clearly includes the cognitive function. One feels, has the sense of infinite reality, only as one asserts it; and assertion is a cognitive act. The importance of this recognition of the cognitive moment in religion lies in the fact that unless this is done religion becomes a subjective experience only. Now, the very heart is taken out of religion, if its objective significance is denied. Faith is the central fact of religion; and the nerve of faith is the conviction of the reality of its object. This conviction carries the whole movement of the religious life, its emotions and its practical attitude. This consciousness of dealing with a reality, a Being which is not the religious man's own self,

or ideal of self, is the living spirit of religion. No one is so deeply interested in the objective reality of what he believes as is the religious believer. The whole value of God to the religious mind is staked on the fact of his existence. "He that cometh to God must believe that He is," expresses the fundamental importance of this element of objective reality attaching to the objects of the religious attitude. Once convince the believer that the object of his faith is not real, and his religious life languishes and dies. The conception of religion which makes it a worship, a devotion to an ideal Self, whether that of the individual or an ideal of humanity, may be held by a philosopher of religion, but it is demonstrably not the conception which the religious man has in his actual religious experience. A thinker may maintain that since religion has no objective basis, the only substitute for it is either a cosmic emotion of some sort, or worship of humanity, or the worship of an individual ideal. He may hold that these are *good* substitutes for religion; that religion belongs to an outgrown stage of man's development; but no conception of religion that does not go directly in the face of the surest deduction from the facts of man's religious history can resolve religion into subjective experience. But if it belongs to the essence, the *essential* definition of religion, that it involves the recognition of objective reality, then the cognitive function is an indispensable moment in Religion.

But if it be a fatal defect in a conception of religion that it overlooks the cognitive side, it is an error hardly less serious to overlook the subordinate function of intellect in religion. Religion demands and claims knowledge; but the knowledge it wants and needs to possess is not that of

the philosopher. The reality which for religion must stand secure is not the reality which philosophy seeks to grasp, or which science tries to comprehend. The religious interest in the world reality is not that of the philosopher. The motives to religious believing and the motives to philosophical thinking are quite different things. Religion seeks truth, knowledge, for the purpose of effective and satisfying life. Religion needs to feel that the Being it clings to in faith is able and willing to protect our lives from evil, from destruction, to save the values of life, to relieve us in distress and peril, to inspire hope in despair, give comfort in sorrow, in short, to save man's life in a hostile and perilous and destructive universe. Any conception of the Divine which makes it capable of satisfying these religious needs, satisfies the religious believer. Religion has survived profound changes in the theoretic conception of the world; and it will survive further changes. Its life can be touched only if it has to surrender its faith in Goodness and Power in the World-Reality as available and really at work for *man*. The knowledge religion demands is limited in scope, and wholly practical in its function. The oversight of this fact, the exaggeration of the importance of the intellect in religion, has had most baneful consequences. Recall the history of religious wars, of persecutions, of martyrdoms, of sectarian strifes, which have rent Christianity, and one appreciates the seriousness of the error in making intellectual belief supreme in religion. The long and bitter conflict between religion and science, in which religion has always suffered not only defeat but the loss of the respect of so many of the noblest minds, and—a sadder result still—has lost so largely her hold upon the intelligence of our modern age, all this

should be set down as the accident of a mistaken view of the function of intellect in the religious life.

In the conception of religion, greater prominence belongs to the feeling and to the will elements than to the cognitive. Those authorities who are disposed to make religion essentially a mode of feeling, or to make it consist mainly in ritual performances, are so far in the right, that the satisfaction of emotional needs, the justification of emotional attitude, motives the religious thinking. The object of faith is in most forms of religion so conceived as to satisfy and to justify the exercise of certain strong and dominating emotions. There must be something in the Divine to call forth and justify fear, reverence, humility, before him, and trustfulness toward him. He must have such a nature that it can make a difference with him whether the worshipper is joyous or sad, hopeful or despondent, penitent, contrite, or conscious of rectitude and loyality toward him. So must also the Divine be so thought that he can be influenced to action toward man by what man does toward him, in sacrificial acts, in prayers, or in obedience to his commands. In the highest stage of religious development, as in the lowest and presumably earliest stage, the gods are wish-granters, hearers of prayer, and on occasions interpose to deliver their servants in trouble and in peril. If the god no longer hears, is silent, and remains unmoved by appeals, by sacrificial offerings and ritual acts, the religious bond between the worshipper and *that* god is broken; that being ceases to be god.

Now, while this is true in the great majority of religious believers, can we say that this way of conceiving the Divine, and his relation to man, is *indispensable* to religion? For

instance, can we deny that Spinoza was a religious man, whom Schleiermacher characterized as a "God-intoxicated man," "full of Religion, full of the Holy Ghost, to whom Religion was his all?" But Spinoza's God hears no prayers, pities no sorrows, hates no sinners, and loves no saint, in return for love. These pathologic states are impossible to the All-perfect, whose nature transcends whatever is finite and imperfect. The God of Spinoza needs no help from man. He is not affected or changed by anything which man can do; yet Spinoza's adoration of this Being, this Perfect Universe; his amor dei intellectus, his joyous trust and perfect resignation to the Perfect Whole, were very genuine and very potent in their influence upon Spinoza's whole manner of living. Can we deny religious significance to the attitude of these men—and they are not few—to whom God is only the "Power in darkness whom we feel?" Nay, shall we say that Epicurus must have been fundamentally irreligious, who maintained that the gods could not in any wise be concerned in the affairs of our human lives, or in the world-order, which is so indifferent, nay so hostile, to our interests? The gods of Epicurus were ideals, models of the life man may admire and aspire to possess. That there are such beings living lives free from want and care, in happy perfect sufficiency, is surely not a matter of no interest or importance even to men, provided they attract us, and move us toward their type of being, and we have some reason to hope we shall attain a like kind of existence; or even if there is no such happy destiny awaiting us, these beings make a difference in our lives while we live. And are the differences less radical which separate the Christian form of religion from the

religion of the uncivilized races, or even from polytheistic religions? What is there common to the Christian conception of God, and the conception which the savage has of the object of his worship? Or what feelings, emotions, are common to both forms of religion, or what forms of conduct are alike in both the religion of the savage and the religion of the Christian? The question which is forced upon us is, is it possible to determine what is the essential nature of religion? And that is to ask, is it possible to solve this first special problem in the philosophy of religion? One way of answering this question is to say, the problem does not properly belong to the philosophy of religion, but to the science of religion; it is in part a psychological question and in part belongs to the historical science of religion. The philosopher should take what these sciences hand over to him. I think the philosopher might be willing to do this, had the psychology and history of religion reached a definite conclusion as to the essential nature of religion. Unquestionably these sciences afford the only data there are for determining what the essential elements of religion are; but beyond supplying these data, it does not appear that they have yet gone in giving a generally accepted definition of the essential nature of religion. Without question, it is along the lines laid down by the psychological-historical study of religion that we must proceed, if we are to reach the solution of our problem. It is true also that tentative definitions of religion have been given by psychologists and historians of religion; but, so far as I know, no one of these has succeeded in finding general acceptance. Nor is it hard to understand why there has been so little success in detremining the essential elements of religion, when one realizes,

as only the student of religion does fully realize, how difficult is the task of really penetrating the religious life of peoples who have left no religious literature, and existing peoples whose expressions of religion are almost entirely ritual—sacrificial acts, the utterance of mere formulæ—or symbols whose meaning can be only dimly divined. It is not difficult to describe and to classify all the phenomena of a religion; but it is quite another undertaking to interpret the thoughts, the feelings and purposes, by which these outward actions are accompanied, or which are embodied in rites and symbolized in various utterances or in *written characters*. The religious life cannot be separated from the general life. Religion is inseparable from man's development; man's religious conceptions and feelings are bound up with his conception of the world and of himself, they correspond to the level he occupies in culture in the course of evolution. Consequently, to interpret the religious ideas and practices of a people one must be able to put himself into their world, to think as they think, and feel as they feel.

The only definition of religion which it seems possible to frame must be in terms of sufficient generality to include every conception and every form of feeling and will-action which, to the individual, has a religious significance. Accordingly, a definition can be scarcely more than the mere statement that religion is that attitude to the world-reality by which man seeks the maintenance of his life, and the satisfaction of those needs he is not able to satisfy by his unaided powers. This attitude is a thinking attitude, in that man gives to his world a meaning for his life-needs. It is a feeling attitude, in that man responds to the object of his belief by appropriate emotions. It is a will-attitude

in that certain actions are always performed for the purpose of maintaining and making more effective the relation between the individual or the community and the Divine Being. In what way the individual religiously thinks, the particular meaning he gives to the object in the religious relation, is relative to his knowledge of himself, the meaning and the value he gives to his life. The same is true of the other functions which constitute religion. It follows from this, that whatever conception the individual does form of his God is essential to the relation he wishes to maintain with this being, and likewise the particular feelings he has and the actions he performs are essential to his religious life. It also follows from this view, that no one of the many possible ways of giving a religious meaning and value to the world-reality is essential to every individual's religion. The only thing which is essential to religion itself and as such is, that some interpretation and valuation be given to the world-reality which for the given individual, or for the community to which he belongs, does guarantee the maintenance and the satisfaction of life. We can, it seems to me, go no farther in this matter of determining the essential nature of religion.

It will aid in making more definite our conception of religion, if we consider the relation between religion and morality, and their distinction or difference. Perhaps the feature of religion which distinguishes it most clearly from morality, is the recognition of a reality which is extra- or super-human. In morality no such extra-human reality is necessary; it *may* exist if man comes to include the divine in an ethical community, but morality does not require this inclusion of an extra-human being. Man can maintain

ethical relations with his human fellows, even did he recognize no divine beings.

A second point of difference is the emotions which are characteristic of each. Religious feelings are quite distinct from those which characterize the ethical relation. Fear, reverence, hope, joy, etc., are quite unlike feelings of obligation, self-approbation, remorse, etc. We note a third difference, if we compare what is fundamental to the meaning of each, religion and morality: faith; duty, obligation; the affirmation of something which already is, and the affirmation of something which *is not* but which ought to be. Religion is based on the conviction that something is *now* real, morality on the demand that something be *made real.* This leads us to note a fourth difference between religion and morality, namely, moral value is created by man's own action; religious value he recognizes and largely receives. In morality the good is that which man creates, in religion man receives the good. In morality man asserts and evinces his own, his highest power. In religion, man depends upon a Power not himself.

Historically viewed, we can say that in their origin morality and religion are contemporaneous and coalesce. Man's recognition of his human fellows and his recognition of beings other than human went together, and his conduct toward his human fellows, and his conduct toward his deities, were regulated by the same customs, and judged by the same standards. Whatever ethical value man gave to his conduct, he made his gods the conservers, the guardians of that value. The gods were associated with man in maintaining and enforcing customs. Nor is it probable that primitive men made an ethical distinction between

conduct which affected human society, and conduct which concerned the divine beings. The point of differentiation, if it can be marked anywhere, should be put where a difference is recognized, between something which is conducive to the welfare of human society, and something which the gods demand. At this point, the two interests diverge and tend to become antagonistic, the two goods, the ethical and the religious, become separated; and the possibility of conflict between them arises. The first definite stage in moral evolution is marked by a break with religious custom, religious traditions. The ethical reformer is irreligious, according to the judgment of his contemporaries, who do not accept his new ethical standard; nay, he may be irreligious in his *own* judgment, for he may associate all religion with beliefs and conduct he has come to reject.

At this point of differentiation of religion and morality there comes the question of their influence upon each other. Is this influence mutual, or is it on the side of one or the other of these departments of man's life? And if so, from which side has this influence come? That morality has influenced religion is abundantly shown by the history of the Greek religion. The gods became more moral in character, as higher moral standards were established. The Greeks had to moralize their deities in order to keep them. The better moral character which they attributed to their gods was the inevitable outcome of their ethical advance which began with Socrates. In the case of the Greeks it must be said, I think, that the determining influence was wholly on the side of morality. The masses may have been made somewhat more moral, because the gods were the defenders, the enforcers of moral law, but the

gods came to hold this ethical position, because the leaders of Greek thought were moral reformers. The gods came to be endowed with distinctly moral attributes, because only so could they remain gods. For man's gods must be the conservers of his supreme values. Only divine beings who are good can be the maintainers of ethical values.

With the Israelites the course of things would seem to have been the reverse, namely, the determining influence, it is maintained by some authorities, came from religion. Moses, the first great ethical reformer, was the prophet of Jahweh, and gave the new moral commands in the name of the new deity. The relation between the community and Jahweh their God was the foundation of ethical relations between the individual members. Their duties were divine commands, enforced by specifically religious sanctions.

We have in the case of the Israelites a religious morality, and also an ethical religion. In Israel, with the masses, morality was enforced by religious motives; hope of Jahweh's favor and fear of his wrath were the incentives and the restraints which chiefly operated with the people, only a small part of which understood or sympathized with the ethical religion of Moses. In Greece, the situation would seem to have been the reverse. The people were forced to entertain better conceptions of the gods, and to less reprehensible religious rites, by their acceptance of higher ethical standards. In Israel, the people were moral from religious motives. In Greece, morality made necessary a better religion. But is it not a fair question, whether the religious-ethical development of the Israelites did not originally spring from the ethical side. Moses came forth as the

prophet of Jahweh, but Jahweh was a righteous God. How did Moses know that Jahweh was in a moral respect so superior to the gods of the other nations and to the deities of popular religion? Did he not in his *thought* create the Divine according to his ideal of life? A God who would maintain the purer ethical ideal, and save the higher value of life, was the only Being Moses the ethical reformer as well as religious prophet could accept. Did not therefore ethical motive impel the movement toward a more spiritual conception of the divine and to a higher type of religious life? And if the religion of the prophets was a strong ethical force, was that not owing to the fact that it became ethical in spirit, and held before the nation and the individual a high and purely ethical ideal?

But whichever of the two influences was the original one in the establishment of ethical-religion in Israel, the fact remains that the moral life of this people was powerfully influenced and sustained by their religion. The ethical religion of the prophets reached its consummation in the religion of Jesus. The cardinal trait in the religion we can with most confidence attribute to Jesus was the inseparable connection between the religious and the moral life. The moral duty enjoined and the motive for doing it were of the same fiber, both religious and ethical. The good will toward one's human fellow was the essence of the moral obligation. It made the goodness of every deed. But this good will was at the same time an expression of the religious life, since this good will was toward a brother in the family of God. So vital, so inseparable, were morality and religion in the conception of Jesus, that no one could be religious who is not ethically good; and no one is as ethic-

ally good as he should be who is not religious. "Ye shall be perfect as your Father in Heaven is perfect," is the ethical standard. "That ye may be the children of your Father in Heaven," defines the adequate motive to the goodness demanded by this ideal.

But the question now confronts us: is this connection between religion and morality an *intrinsic* and *necessary* one, or is it accidental? Is religion essential to the best type of morality, or can morality be divorced from religion without detriment, nay—with a gain? Such is the opinion entertained in some quarters to-day. It is maintained that the time has come for a complete dissociation of the ethical life, ethical education and ideals, from every form of religious belief, and religious motives. This view is, that morality is indispensable to man's development, to his social life, to the advancement of the race; but religion is not a necessary element in man's spiritual development. It represents rather a stage of his development, which he will leave behind him, an adjunct which may have been serviceable to him in the past, but which is no longer a help to his progress, but for the most part a hinderance. This view, that religion has only an accidental and adjunct connection with the life of man, and is destined to entire elimination in the future, has against it the concensus of opinion, founded upon the psychological-historical study of religion. From the historical point of view and in its psychological aspect religion appears to be as much an original endowment of man's nature, an element in his spiritual life, as indispensable, as man's ethical nature. Man is as naturally and necessarily religious as he is ethical. The interests of his life which religion comprehends

are as deep-rooted and indispensable as are the interests of morality.

Such appears to be the deduction from the profoundest study of man's nature and history. There seems as little reason to expect man will cease to be a religious being, as for expecting he will cease to be an ethical being.

In concluding this discussion, I will suggest two ways in which religion is serviceable to morality. It enables man to give a higher valuation to his life, it enriches the meaning of his existence, it takes him out of the merely temporal and transient, and makes him a member of a more vast and enduring order. He shares the life of those Beings who are above him, in whom he believes his ideals of what is best and most satisfying are realized. Now this higher valuation which religion gives to the personal life deepens the sense of moral obligation, makes more binding the claim of the individual upon the service and regard of his human fellows. The welfare of human beings is important in proportion to the valuation put upon human life. The essence of morality is conduct directed to the promotion of human welfare. Religion in its best form enormously increases the interest of human welfare; and by so doing it greatlyenlarges the range of duty and deepens the sense of obligation.

In a second way religion is contributory to morality. It supplies the maximal stimulus, without which the moral life comes short of its finest, its noblest action. The moral appeal is apt to fail of its maximal stimulus, where it is not reenforced by the recognition of the larger claim, the higher value, which religion creates. The Great Claimant must be there if man is to make the fullest, the most loyal response to duty of which he is capable.

The Problem of God, the Object of Religious Faith

The second problem in the philosophy of religion might be stated as the justification of religious faith. We have seen that the assertion of objective reality is indispensable to religion. The believer claims objective existence for the being to which he unites his life and his destiny in the religious bond. It is the function of philosophy to determine the validity of this claim, to ascertain what are the rational grounds in which rests religious faith. Our examination will limit itself to two conceptions of God: The theistic conception; The pantheistic conception or the conception of idealistic pantheism.

We must first distinguish these doctrines. The essential elements in the theistic conception are the following:

1. The personality of the Divine Being. Theism maintains that God exists in the form of Personal Life, His personality is conceived after the analogy of our own self-conscious mode of existence. His essential difference from us, is the perfection of the attributes which we possess only in an imperfect degree. God possesses these attributes of personality each in a degree infinite and perfect.

2. In his essential nature, God is distinct from the world, and from our human selves. The world is dependent upon Him for its existence and the continuance of all its forces, its order and its development. It is here that the line of sharpest distinction runs between theism and pantheism. A pantheist can attribute to God personal existence, but he maintains that in his essence God is not distinct from the substance of the world, he asserts the identity of God's nature with our human selves. It is

vital to theism on the contrary to maintain the distinctness of God in his own nature from our human selves. It is especially the relation of God to our human selves that is essential. A theist may accept the Berkeleyan idealism, and therefore accept a pantheistic conception of the material part of the world, since matter is reduced to perceptions of our minds, produced by direct and constant action of God, and the order of Nature and the world of physical science becomes, as we say, an expression and a realization of the world-ideas in the Divine Mind. But on the relation between God and the human self the divergence of the two doctrines is real and, as most theists maintain, momentous. For, as the theist maintains, our existence and natures are so far distinct from the existence and nature we must attribute to God that there is foundation for an ethical and religious dualism; a real otherness to God is the basis of the ethical and religious attitude we take in relation to Him. As ethical individuals, our wills are ours; our freedom and our responsibility are unique experiences; so are our actions, our ethical experiences in right and wrong doing. And likewise in religious experience there is a distinction between our selves and God which goes to the point of purposes, actions, and feelings, which are our own, and are not shared even by God. Here our wills are ours, to make them His; but also to oppose them to his will.

Pantheism, while it recognizes in our human selves something which is not in God, namely, finiteness, dependence, error, and wrong-doing, maintains that our wills are in what is essential to them parts of the One Will, are wills within his will, and our total experiences are moments in the Inclusive Experience. The essential identity of natures,

the oneness of substance, appears in this, that each finite thought, when made completely true, is God's thought; each finite purpose, if its aim could be reached, would be identical with God's purpose; each finite experience, could its partial and fragmentary character be done away with, would be seen to be one with God's experience. Every human self is therefore a partial self within the one only Complete Self, or Individual. God, therefore, is what we would be, if made complete. We are consequently in essence one with God. In the fullest sense of the words "We live, move, and have our being in Him," and "God is all and in all."

Theism, on the contrary, gives to our human self a substance existence, makes it capable of actions and experiences which have their source, their explanation in this self, not in God—the Other Self. God is author of our *possibilities*, but not of our actualities. In action which is our own, and self-determined, we can take the attitude of trust, obedience, loyalty toward God; or we can, of ourselves, take the opposite attitude. These actions and experiences God knows, but they are in no sense *his*.

> ". . . . . God, whose pleasure brought
> Man into being, stands away
> As it were, a hand-breadth off, to give
> Room for the newly made to live,
> And look at him from a place apart,
> And use his gifts of brain and heart."

Having distinguished the two conceptions of God, I shall now examine the doctrine of theism; and this I shall do by a discussion of the historic proofs of the existence of God. These proofs go back to Anselm, the

great theologian of the Scholastic period. The oldest of these is the one, elaborated by Anselm, commonly called the ontological argument. It seeks to establish the existence of God by a strictly *a priori* and absolutely cogent process of reasoning. Originally formulated by Anselm, and later modified by Descartes, the substance of the proof is the following:

The conception of God is that of the most perfect being. God is not rightly thought unless he is thought as absolutely perfect. Now existence belongs to the conception of the most perfect being. God is not rightly thought unless thought *as* existing. Therefore the existence of God necessarily follows, from the true conception of God. God's existence follows from the idea of Him by the same necessity by which the equality of the radii of a circle follows from the conception of the circle. To assert that God is a perfect being and to deny that He therefore exists, is as great a contradiction as it would be to assert that God is perfect, and yet is lacking in something essential to his perfection.

It is surprising that this venerable argument should have seemed convincing to many minds, and some of them eminent as thinkers. A slight examination reveals its unsoundness. The proof rests upon an assumption which is very hard to substantiate, namely, the identity of thought and being. Absolute idealism makes this assumption, and the thinkers of this type maintain that the ontological argument is essentially valid. From another point of view the argument commits the fallacy of irrelevant reasoning. From the propositions which constitute the premises all that follows is that existence belongs to the *conception* of God, not that God must exist. God exists in *thought;* but not

for that reason does He exist in *actuality*. The real source of the belief which this argument has been supposed to validate is the response of our nature to the ideal of a Perfect Being. The demand that what is perfect shall be something more than an idea, this assent to the idea of God as the perfect Being, comes from our feeling and volitional nature—for if God does *not* exist then the *most perfect* does not exist; and it is intolerable that the most perfect should *not* exist.

The second proof of the existence of God has been called the anthropological argument. It was elaborated by Descartes, and proceeds in this way:

Descartes said, he found among the various ideas in his mind the idea of God as a Perfect Being. Now, assuming the validity of the principle of sufficient reason, namely, that for everything which exists or comes to be there must be a sufficient reason for its existence—in other words, an adequate cause must exist for that which comes to be—there must be found a sufficient reason for the existence of the idea of God in his mind. His own mind could not be the adequate cause of the existence of the idea of God, because his own mind was finite, imperfect; the idea of God is that of a Being who is infinite and perfect. Were his mind the cause of this idea, finite cause would produce an infinite effect, which contradicts the principle of sufficient reason; for that asserts that the cause must at least be equal to the effect. The only adequate cause for this idea of God in his mind, Descartes maintained, was God himself; and consequently God must exist in reality, and not merely in idea. This argument is closely akin to the ontological one. It professes to proceed, however, on a different

principle, a conviction, namely, the connection of cause and effect.

Is it not surprising that so clear and so severely intellectual a thinker as Descartes, the founder of rationalistic epistemology in modern philosophy, should have thought this argument valid? Scarcely more than a superficial examination is necessary to bring to light one wholly unwarranted assumption on which the reasoning is based, namely, that the relation between a thinker and his thought is of the same nature as that between cause and effect, or the relation between an explaining principle and the fact explained. The cause-and-effect relation holds only between an explaining principle and the fact explained. The cause-and-effect relation holds only between objective existences, or between phenomena in nature. The mind is not a cause of its thought. Descartes' assertion that the human mind cannot explain the existence of the idea of God in it cannot support itself on the principle of sufficient reason, if that is interpreted as Descartes interpreted it The assertion is clearly dogmatic; against it can be put with equal reason the assertion, man *can* think of God as a perfect Being. But were it admitted that Descartes had established his proposition that God is the only explainer of the idea of himself in the human mind, the argument would not establish the essential proposition of theism, but of pantheism. For if God is the only explainer of this thought of Himself, then it is God who thinks in the human mind; and the human mind is a mode of God's thinking; and that is the doctrine of pantheism. Thus would Descartes' anthropological proof, if valid, establish the doctrine of pantheism, not the doctrine of theism.

The third of these classical proofs of the existence of God is the cosmological proof. The cosmological argument proceeds along two main lines, which are distinct; and it will be advantageous to follow out these lines separately. The first of these proceeds from the contingent existence of the world. The argument which moves along this line may be developed in the following way: Everything in the world has its cause; but every cause is in turn also for that very reason the effect of another cause. Thus, there is in the world a continuous chain of causes, which looked at from behind are effects, and viewed from before are causes. Thus, everything in the world has its basis without itself, is contingent. What is true of individual things is also true of the world as a whole. Applying the law of causation to it, as a unity, we must inquire after its cause. But if we simply ascend endlessly from effects to other effects, and other causes, we should have a series of effects without a beginning, which is as unthinkable as a stream without a source. Therefore, reason must assume a necessary fundamental cause of the world, which is not in turn the effect of another cause. That being is God.

I will suggest the following criticism of this argument. The argument rests upon two assumptions which may be fairly challenged.

1. That what is true of particular things in the world is true of the world taken in its totality.

2. That a causal chain if extended beyond the world can terminate in an extra-mundane cause, which is not itself an effect.

The first assumption is perhaps the back-bone of the argument. But is it tenable? Because everything *in*

the world has its cause or explanation in something outside of itself does it follow that the world-whole, or the system of all these causally connected things in the world, must have a cause or explanation in something which is outside of or distinct from itself? Can it be maintained that the world system which explains the existence and connection of things within the system must have a cause of itself which is outside of its own nature? Can we assume that the principle of causal connection has any relevancy outside the cosmos itself? Is the second assumption any more tenable? Is it logically possible to escape the endless chain, if we extend the principle of causal explanation beyond the world within which its validity is unquestioned? Is it not a purely arbitrary procedure, to avoid the regressus ad infinitum by the assumption of a cause which is not in turn an effect?

The second form of the cosmological argument proceeds from certain facts of the world's structure. There are two such facts each of which is the basis of a distinct proof: (1) Causal-connection, the systematic connection between all parts of the cosmos. (2) Adaptations, especially those which abound in the organic world. The theist maintains that the two distinct lines of proof which set out from these features of the world's structure converge upon the one inference to a world-creator, who is distinct from the world, and to whom the world owes the structure it exhibits.

The argument from causal connection is the following: However we conceive the ultimate structural elements, whether as the monads of Leibniz or as the atoms of physical science, the problem presented is, to explain their interconnections, their reciprocal influence This interaction

is possible, only if each element acts as if it took account of all the other elements and adjusted its activities and states to those of every other like element, and to the demands of the entire cosmos. For the behavior of any one monad or atom requires for its explanation the simultaneous behavior of every other monad or atom. Now, whether we assume that a dynamic connection obtains between the elements (*i.e.*, an influence exerted by the elements) or whether, with Leibniz, we suppose a preestablished connection between these elements, the explanation of this character of the cosmos must be found in a Being who is distinct from these elements, and from the cosmos itself; and this Being must have constituted each element with a reference to every other constitutent element, must have embraced all in a comprehending thought, a cosmic-plan. This argument concludes that there must exist an extra-mundane Being who is the creative ground of these many interrelated beings.

I will suggest the following objections to this argument:

(1) Even were the inference to some extra-cosmic Being valid, the evidence does not warrant the conclusion which the thesis requires; namely, that this Being possesses infinite attributes, and especially moral attributes. The universe, so far as we have knowledge of it, is finite, and imperfect, and it need have only a finite and imperfect creator or explainer. (2) This structure of the cosmos does not point to an extra-cosmic Being as its cause or ground: there is nothing in the facts which necessitates the *theistic* inference. The explaining ground of the world may be immanent. The world structure may be the form, the phenomenal manifestation of his Being, as pantheism maintains. (3) But does this structure of the world necessitate

the inference to a world mind, a unitary being, whether extra-mundane or intra-mundane? Is it not conceivable that these elementary beings, monads, or atoms, are the ultimate reality (as pluralism maintains)? And these beings, by their actions and reciprocal influence, have brought about the order and systematic connection which the cosmos presents? Why must order, unity, and system preexist ideally in some cosmic mind? Why may they not be the *result* of the action and mutual influence of the many independent beings? Our world may, therefore, possess this structure, because a world having such a structure is the only one which could exist at all.

The second of these cosmological arguments is known as the argument for design. It sets out from adaptations, particularly those we find in the animal world. These adaptations are secured by special organic structures, and functional activities correlated with them. Animals are fitted to the conditions of their life, and maintain their existence in virtue of special organs which adapt them to the performance of actions which are essential to the maintenance and perpetuation of life, either of the individual or of the species. It is this general fact which forms the basis of the design argument.

The argument proceeds in the following way: These adaptations, and the organs by which they are made possible, could not have been produced merely by forces or agencies which act blindly, but only by an intending, a designing mind, which either directly brings into existence such organisms, or indirectly, operating through secondary agencies and controlling and directing those forces to a preconceived end. Such organs as the vertebrate

eye, the wing of the eagle, the human hand, compel the inference to a designing mind. This inductive inference is of the same nature as the inference to design when in the case of human productions we have before us certain structures which show adaptation to uses or ends. Given a set of marks in a nature-production which are identical with those from which we invariably infer design in the case of human production, the inference to a designing mind in nature is as cogent as in our human world. For the basis of the inference is the same in both cases; that datum is a given structure, or function, the production of which involves the convergence of different and independent agencies upon a common result, the cooperation of several factors in the production of a single result. Take the eye, its single function is vision; but vision is possible, only if each of the several parts of the eye is so related to all the other parts that each and all by simultaneous and coordinated actions produce the single result—vision.

Now this relation of the several parts of the eye to each other, and their common relation to the single end, vision, is as undeniable, as is the relation of the several parts of a watch to each other, and their joint relation to a single end, measuring time. Nay, *this* relationship is of precisely the same character in both, namely, the simultaneous action of a number of distinct parts toward a common result, the coincidence of a number of independent functions so as to effect a single function. Now if in the case of the human production, say a watch, we can solve this problem only by the supposition of a designing mind, can a problem of the same character which a nature production presents, say the eye, be solved without the supposition of a designing

mind? The theistic teleologist maintains that this argument is perfectly valid, that the probabilities against the supposition that the vertebrate eye came into existence without an agency of this nature are millions to one; in other words, such a supposition is irrational.

The criticisms of this strongest of the theistic proofs which I will indicate are the following.

1. Were this argument valid, it would not establish the proposition which is essential to theism, namely, that this designing mind is an all-knowing, all-powerful, and perfectly good Being. These nature productions are none of them perfect, most of them are very imperfect; not even the human eye reveals a perfect contriver—a better instrument for its purpose is quite conceivable. And adaptations and adaptive structures which are in a large measure successful, and rightly excite our wonder and admiration, are mingled with countless failures and defective organic structures. Consequently the only designer it is admissible to infer from organic nature is one which is finite in knowledge and in power. The moral attributes which can legitimately be inferred from nature come far short of those which theism assigns to God. The God behind nature *may* be good according to the theistic conception, but can it any longer be maintained that nature *reveals* goodness? Or that the cosmos as science has made it known is a "school of virtue"? Could a man imitate the ways of the cosmos, and not be reprobated by his fellow men, as heartless and cruel?

2. But, even were it permissible to argue from organic nature to a being possessing infinite attributes, need this being be extra-mundane, as theism maintains? Why may

he not be intra-mundane, nay the world-substance, as pantheism teaches?

3. Once more the assumption on which this argument is based tenable—namely, that the essential problem being the same in the case of human productions and in nature productions, it must have been solved in the same way? May not nature have solved *her* problem by an altogether different method? Because we resolve the function of vision into a complex structure, with a number of distinct parts which are related to a single purpose, and which conspire as it seems to us to produce the single result—vision, must we infer that the eye-making agency proceeded after the fashion of our human art? That it began with the parts and fitted them together under the guiding idea of the end to be attained? Is it not quite supposable that the method we perhaps must follow in *explaining* the productions of nature is not the method by which these productions have been brought forth? May not teleological interpretation be subjectively necessary, while it is not objectively true? I have, I am aware, already made these suggestions in the discussion of the mechanical and teleological explanations, but their bearing upon the theistic argument has seemed to justify a partial repetition of them in this connection. I will close this discussion of theistic teleology with a question which I prefer to leave open to the student. Was the statement of Huxley justified, which was to the effect that natural selection has given the death blow to the argument for design?

There remains one more theistic proof which it seems worth while to examine. Pfleiderer, who elaborated this argument, regarded it as an improved form of ontological

proof; but it is properly an epistemological proof. This proof is based upon the fact of our knowledge of Nature. In substance the argument is the following: Both Nature and our human minds proceed in accordance with laws of their own; neither of itself determines the other to conformity with its own laws. And yet the fact that we know nature is possible only if the laws of Nature and the laws of our thinking agree or are in a sense parallel. Our science, especially the exact sciences mathematics and pure physics, are based upon the conformity of nature to our minds. Were nature not mathematical in her processes, did she not as it were geometrize, and solve the most complex and intricate problems of thought, then the science of mathematics and of pure physics would be impossible as an applied science. Now, this fundamental agreement between the laws of our thought and the laws of things can be explained only by the supposition that the world ground is also the ground of our rational minds; and this basal reality must be *mind*, and this mind must be distinct both from nature and from our human minds; this being is the source and the unity of both nature and our minds.

But does this reasoning lead to a theistic conclusion, and not rather to pantheism? Why may not this world-ground, the principle of this preëstablished harmony between our minds and nature, be the One-All-and-only completely real being, the substance of Spinoza or the Absolute of Royce? Is it not a simpler explanation of this harmony between our minds and nature to assume that both are modes of the one substance? Our thoughts agree with things because both are thoughts within the one thought. To make this argument valid as a theistic argument, it would be necessary to

establish the doctrine of metaphysical dualism and realistic rationalism, a philosophical task which the theistic philosopher is not likely to accomplish.

Our conclusion must be that the doctrine of theism is not susceptible of proof, the theistic's reasons not convincing. The theistic conception of God is for ethical and religious reasons accepted by most religious believers among civilized peoples; but the strength of this belief is not derived from the arguments which theology has constructed for the support of faith. These historic proofs achieve nothing more than to show that this conception of God is possible; such a Being may exist. The right to believe that He exists cannot on rational grounds be denied, the facts of ethical and religious experience go far in justifying this faith. For many theological thinkers no other conception of God is compatible with the essential facts of religion or morality. But the conclusion we have reached in the examination of the proofs by which theistic belief is supported is, I think, sound; namely, these proofs do not accomplish the purpose for which they were constructed, namely, to demonstrate to the understanding that what faith accepts as true *is* true.

The Pantheistic Conception of God.—The distinctive feature of pantheism we have seen is the identity it maintains between God and the world, inclusive of our human selves. Perhaps most pantheists reject the personality of God, holding that He transcends the personality form of existence, but this denial of personality in God is not the essential mark of pantheism. A pantheist may maintain that God is the only true or complete person, the only complete individual.

I shall accept this type of pantheism in the examination

I propose of this form of religion. Professor Royce declares that the proof of the existence of God as an omniscient Being, the All-thinker and All-knower, is of the character of a demonstration, is consequently absolutely cogent to the exclusion of legitimate doubt.

There are three lines of this proof as follows: The relation itself between our thought and the object of that thought involves the actual possession of that object by some thinker who includes in his thought our thought and its object. Otherwise, we could not think of an object at all. "Unless the thought and its object are parts of one larger thought, I can't even be meaning that object yonder, can't even be in error about it, can't even doubt its existence." (Spirit of Modern Philosophy, p. 373.) "It is just this fact of our experience, that we think of objects, from which the logically necessary conclusion is drawn that a thought, inclusive of our thought and its object, exists." "The existence of such a Being is reached by a rigid analysis of our most commonplace thought" (p. 373).

The existence of an All-knower is proved by the possibility of error in our thinking. "An error" says Professor Royce (Religious Aspect of Philosophy, p. 425), "is an incomplete thought, that, to a higher thought, which includes it and its intended object, is known as having failed in the purpose that it more or less clearly had, and that is fully realized in this higher thought." An error is, therefore, possible only if there is a judging thought other than the thought which errs. Only in relation to such a thought does error have any meaning and a possible existence. Whoever says that there are, or may be, such things as

errors in the universe, necessarily, by implication asserts the existence of that Thought for which an actual error is actual, and a possible error is possible; such a Being must exist if I can even be in error about anything whatever.

The confession of ignorance is logically possible only if an Absolute Being exists. "Our ignorance *means* that there is some sort of possible experience, some state of mind, that you and I want, but which we do not now possess" (The Conception of God, p. 12). The knowledge we desire in our ignorance can be defined as an adequate knowledge of the contents and the objects of a certain conceived and ideal sort of experience. "It is only in terms of contrast between this lower experience and a higher one that this ignorance is definable at all" (Conception of God, p. 28). Now, the experience in contrast with which only can we be ignorant must be an *actual* not a merely ideally conceived experience; for, if we say, "Beyond our finite experience there is or need be no further experience." the answer must be, "only on the assumption of that experience which you deny, can it be a *fact* that there is no experience beyond the finite." The proof, therefore, that the Absolute Experience is real is the very effort to deny it, or to assert that it need be only a possible experience.

In our very ignorance therefore we must know that God is. This argument to prove the existence of God is certainly ingenious and novel; but its validity is, I think, fairly open to question. The proof from the relation of thought to its object is valid only if the monistic conception of the world is the only rational one; and we have seen that monism is not susceptible of demonstrative proof.

The peculiar relation of thought to its object which

Professor Royce maintains is not the only kind of relation which can exist.

The pluralist can well maintain his position that this relation of a finite thinker to the object of his thought needs for its meaning no other thinker than the mind that thinks of this object.

The rejecter of the Roycean Absolute cannot be convicted of logical contradiction or even of existemlogical error, when he asserts that such things as truth and error can exist even should there be no All-knower who knows that truth or that error.

Unless Professor Royce can demonstrate the truth of the proposition, there cannot be a world in which there are only finite knowers; he cannot prove the existence of this Absolute from the existence or the possibility of error. The anti-absolutist will see as little force in the argument devised from the confession of ignorance. If I merely confess my ignorance, my utter inability to make affirmation or denial concerning what transcends my finite experience, what logical necessity is there for an Absolute knower to know this fact of my ignorance? I, this finite thinker, am competent to know so much; and why, pray, must there be an Absolute experience within which my fragment of experience must be contained?

But, even granting this argument is valid, the question arises, Does it not prove too much? too much for the interests of religion? Does the God, whose existence this argument is supposed to establish, leave any room for other beings, who are capable of religious experience, of sustaining to Him that sort of relation which is essential to religion? Does not the reasoning by which Professor Royce thinks

he conclusively proves the existence of his One God, if it proves anything, prove that *only* God really exists? The student will recall the objections to the Roycean Monism in the chapter on monism and pluralism and he will see that these same difficulties lie in the way of accepting this form of monism in its religious aspect. But in reference to this very persuasive doctrine of Professor Royce, the counsel I have had occasion to give in more than one instance is again in place. Weigh and decide for yourself. "Prove all things, hold fast to that which is good."

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